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ABSTRACT

This document contains detailed information on the performance and characteristics of the vocational education and training (VET) system in Australia in 1996. The report looks at a range of specific key performance measures for the VET sector. Some highlights of the performance of the VET sector in 1996 include the following: (1) more than 1.35 million students were in VET programs delivered through public funds; (2) more than 20 percent of VET students enrolled in business study programs; (3) an estimated $2.79 billion was spent on VET; (4) more than 263 million annual hours of education and training were delivered; (5) the number of apprentices and trainees increased by 17 percent; (6) there was an increase in participation of native peoples in training; (7) 74 percent of employers responding to a survey indicated satisfaction with VET programs; and (8) about 80 percent of students were satisfied with their course outcomes. Areas for improvement were identified: unmet student demand for VET, differences in satisfaction across industries, and services to meet the needs of small employers. (KC)

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ED 420 759

ANNUAL NATIONAL REPORT

1996

VOLUME THREE

3

BENCHMARKING VOCATIONAL EDUCATION & TRAINING

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Cover photographs: (clockwise from top left) Ciaran McAssey, SA, 1996 Trainee of the Year; Ella Wright, Tas, 1996 Apprentice of the Year; Guy Doyle, Tas, 1996 Vocational Education Student of the Year; Michelle Simms, WA, 1996 Aboriginal and Torres Strait Islander Student of the Year.

ANNUAL NATIONAL REPORT

1996

THE PERFORMANCE OF THE VOCATIONAL EDUCATION AND TRAINING SECTOR IN 1996 VOLUME 3

4

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VOCATIONAL EDUCATION AND TRAINING IN 1996

Vocational education and training (VET) in 1996 is diverse, encompassing a range of providers, both public and private. VET is funded by the Commonwealth, States and Territories, as well as some fee-for-service activity. This report focuses of the performance of VET providers in receipt of public funds.

VET clients are equally diverse ranging from young people looking for skills to enter the labour market as well as adults pursuing new career paths and workers upgrading skills. Aboriginal and Torres Strait Islander people are well represented in VET as are Australians from non-English speaking backgrounds.

VET programs of training cover a range of fields of study servicing diverse industries and occupations. TAFE graduates contribute predominantly to the retail trade and manufacturing industries and are more highly represented in the private sector compared with their higher education counterparts.

Employer satisfaction with VET graduates is reasonably high with indications of around three quarters of employers being satisfied with the VET system although this is uneven across different industries and industry sectors.

This report looks at a range of specific key performance measures for the VET sector. These are discussed in detail in later sections of the report while specific areas of achievement and those needing improvement are noted below.

In general the 1996 data is an improvement on 1995 data. Specifically unit cost data has been reviewed for quality and comparability between jurisdictions. The review found that differences in unit costs are due to other factors than those of data quality. Participation data in the access and equity area has also improved. The percentage of participants who did not report whether or not they belonged to particular equity groups has generally decreased since 1995.

INTERPRETING KEY PERFORMANCE MEASURES

The key performance measures outlined below were endorsed by the Performance Review Committee of the ANTA Board for reporting the performance of the vocational education and training sector in 1996. This is the second year in which the VET key performance measures have been reported nationally. The current interim set of key performance measures are those used in 1995 with the addition of two new ones, namely, total module load completion per public dollar expenditure (KPM6) and public cost per public module load completion (KPM7). A new set of key performance measures is being developed for use in subsequent reports by the committee.

These measures provide a global picture of performance of the sector in relation to its input, activities, outputs and outcomes and the impact of these on the stakeholders of the system encompassing industry, enterprise and individuals. The performance information in this report also looks at participation in relation to particular groups in the community including women, Aboriginal and Torres Strait Islander people, people from non-English speaking backgrounds, rural and remote people, and people with a disability.

These measures provide summary information only and are a starting point for further analysis at the State/Territory level. The reasons for any difference in performance need to be looked at locally and may relate as much to the essential characteristics and features of a region or provider as they do to any other factor. The following is a summary of key findings.

More detail on each measure is contained in subsequent chapters of this report. Care should be taken in interpreting measures, using the fuller analysis provided.

HIGHLIGHTS OF THE VET SECTOR IN 1996

In 1996:

- over 1.35 million students were in vocational education and training programs delivered through public funds combined with fee-for-service provision through public providers, of whom 47 per cent were female
- over 20 per cent of VET students enrolled in business study programs, followed by preparatory and general education programs (around 18 per cent) and engineering (around 17 per cent)
- VET clients attended programs at 106 public training institutes (including 84 TAFE institutes); at 514 community providers and 397 private providers in receipt of government funds encompassing enterprises, commercial providers and schools
- Governments at Commonwealth and State and Territory levels spent an estimated $2.79 billion on vocational education and training.

Areas of Achievement

- More than 263 million annual hours were delivered through public funds combined with fee-for-service provision through public providers, an increase of 2.5 per cent from 1995
- there were 161,496 apprentices and trainees under contracts of training as at 31 December 1996, an increase of 17 per cent from 31 December 1995
- the participation of Aboriginal and Torres Strait Islander peoples in VET increased from 2.1 per cent in 1995 to around 2.4 per cent in 1996; this compares with the indigenous population of 2.0 per cent of the total population
- 74 per cent of employers responding to the National Employer Satisfaction Survey indicated satisfaction with VET programs
- large employers expressed satisfaction with skills acquired and job readiness of graduates (86 per cent and 84 per cent respectively)
- around 80 per cent of TAFE graduates who wanted to get a job were satisfied with their course outcome
- almost 85 per cent of students in VET modules (subjects) achieved a successful competency or were in the process of attaining competency
- an overall pass rate of 82.2 per cent was achieved while an overall completion rate of 85.1 per cent was achieved.

Areas for Improvement

- unmet student demand for VET is greater than for higher education
- there are significant differences in satisfaction with the VET system across industries generally
- industries which were least satisfied with the type and quality of VET graduates were communication services, mining and property and business services
- small employers were more likely to express dissatisfaction with the VET system not taking the needs of employers into account.

PART A

BACKGROUND

WHY THIS REPORT?

This report is the second national report of key performance measures for the VET sector and was commissioned by the board of the Australian National Training Authority (ANTA) through its Performance Review Committee (PRC).* The Performance Review Committee was established in 1996 to take forward the matter of performance reporting and resolve some aspects of performance measures raised by the first report *Benchmarking VET: the performance of the VET sector in 1995*. The committee's terms of reference are to:

- advise the ANTA Board on appropriate key performance measures for vocational education and training
- undertake further analysis on the outcomes of performance information already available, and
- commission work as needed to support its advice, from the National Centre for Vocational Education Research (NCVER) or other appropriate agencies.

Subsequently, the NCVER was asked to prepare this report. The committee also asked that the same measures used for 1995 be used as the basis of reporting on 1996, pending the outcome of further work and analysis undertaken to determine a revised long-term set of measures. It also asked that the same process be followed for the preparation of the report, building on the success of the collaborative and cooperative approach taken the previous year.

While this 1996 report uses the measures used in 1995, it also reports two new measures, namely, government recurrent expenditure per total module load completion (KPM6) and government recurrent expenditure per public module load completion (KPM7).

WHAT DOES THE REPORT COVER?

The report covers the inputs, activity, outputs and outcomes of the vocational education and training sector largely as it relates to the delivery of training rather than to the facilitation of training arrangements or quality assurance and regulation of training. In doing so, it looks at:

- the clients of the system, including students and student characteristics, as well as employer responses
- the providers of training encompassing publicly funded private provision for the first time
- the programs of delivery within VET
- the outcomes in terms of graduate destinations and employer satisfaction, and
- the outputs of delivery in terms of successful completions.

Each chapter of the report will include a description of the scope and coverage of data contained and reported in that chapter, for example, data covering predominately VET delivered by providers in receipt of public funds, information on the whole of the VET sector, or information dealing with the TAFE sector only.

* This report provides information about Australia's vocational education and training system. Information about ANTA (the Australian National Training Authority) is provided in the ANTA Annual Performance Report.

HOW IS THIS REPORT STRUCTURED ?

The report is divided into three parts:

Part A looks at the context of vocational education and training and sets the scene for measuring performance of the sector.

Part B provides an analysis of the following performance measures:

Key Performance Measures

Participation in VET
Participation Rates

TAFE Graduate Destinations
Graduate Destination

Employer Satisfaction With VET
Employer Satisfaction

Successful Outputs in VET
Module Load Pass Rate
Module Load Completion Rate

Unit Costs
Government Recurrent Expenditure per Public Annual Hours Curriculum (AHC)
Government Recurrent Expenditure per Public Module Load Completion
Government Recurrent Expenditure per Total Module Load Completion

Actual and Planned Activity
Actual and Planned Student Load (AHC)

Part C deals with technical aspects of the data, its collection, and the adjustment processes undertaken in the course of compiling this report and also provides further relevant information considered too detailed for inclusion in the main body of the report.

With an emphasis on *vocational* in VET, the labour market plays a significant part in shaping the VET market and determining the level of demand for VET. This chapter therefore provides the labour market context in which the VET system operates and discusses the economic outlook which may affect demand and supply of VET.

INTRODUCTION

The Australian economy grew by 4.3 per cent in 1995-96, this rate of growth being significantly stronger than the average annual growth rate of 3.3 per cent for the five-year period 1991-92 to 1995-96[1]. Market analysts are optimistic about the economic outlook for Australia with predictions for future growth in the economy of around 3.2 per cent in 1996-97, 3.7 per cent in 1997-98 and 3.5 per cent per annum beyond 1997-98[2].

Notwithstanding the importance of domestic factors in determining the performance of the Australian economy, the world economic climate is a key determinant of Australia's prospects for economic growth and associated demands on the labour market and demand for VET. Exports and imports now account for 20 per cent of the level of overall economic activity compared to around 15 per cent prior to the start of deregulation in the early 1980s. World economic growth, at around 3.4 per cent in 1996, is predicted to strengthen to levels at or above 3.7 per cent to 2000.

WHAT ARE ECONOMIC OUTLOOK IMPLICATIONS FOR SKILLS REQUIREMENTS?

Assuming Australia retains its current level of international competitiveness, the positive world economic outlook will support further growth in all categories of exports. While all sectors have grown in absolute terms the relative composition of exports has altered over the 1990s. The value of manufacturing exports has increased significantly over the period and the services sector, in particular, has grown in relative value over the 1990s (see table 2.1). The growth in the services sector is due primarily to a sustained increase in the number of overseas tourists visiting Australia.

Due to four years of increases in real capital expenditure and significant new investment in the metal processing sector[3], it is anticipated that there will be substantial growth in output from the mining sector over the next few years. Although the mining sector is not a labour intensive industry, increases in skilled labour will be required to accommodate the anticipated growth in this sector.

Table 2.1: Proportionate Value of Australian Exports of Goods and Services (Per Cent)

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Rural	21.3	22.5	22.5	22.4	22.0	21.7
Manufacturing	14.3	15.0	16.3	17.4	18.4	18.7
Minerals and metals	41.8	40.0	38.5	35.4	34.3	34.2
Other non-rural	1.9	1.8	1.7	2.2	2.0	2.1
Exports of goods	79.2	79.0	79.0	77.4	76.7	76.6
Services	20.8	21.0	21.0	22.6	23.3	23.4

Source: ABS *Australian Economic Indicators*, Cat. No. 1350, April 1997

[1] Derived from GDP at average 1989-90 prices (production based) reported in Australian Economic Indicators, ABS Cat. No. 1350.0.
[2] ABARE Commodity Overview, National Agriculture and Resource Outlook conference, February 1997.
[3] Ibid.

Growth in industrial production is expected to decline consistent with developments in other OECD countries, as industrial production continues to relocate to the developing economies. These developments have implications for the manufacturing sector and imply a slowing in the demand for labour. At the same time, in order to remain competitive, industry will require improvements in the skills of the work force to enable the take-up of new technology.

INDUSTRY GROWTH ACROSS SECTORS

The demand for training and skill acquisition is derived from the demand for labour. Therefore, it is useful to consider changes that are occurring to employment across the economy as these will impact on the demand for skill acquisition through VET.

The impact of the economic outlook will differ across the nation depending on the industry profile of particular States and Territories. A breakdown of recent growth of GDP for Australia as a whole, by industry sector, is presented in table 2.2. Recent rates of growth in real gross state product (GSP), and the breakdown of 1994-95 gross domestic product (GDP) by industry sector, are both given by State and Territory in tables 10.1 and 10.2 respectively (in the additional notes in Part C). All three tables should be considered in order to make an assessment of the growth prospects of industries and the relative demands for VET by State/Territory.

Table 2.2: Industry Growth: GDP at Average 1989-90 Prices (Production Based)

	Average annual rate of growth for the five year period 1991-92 to 1995-96
Agriculture, forestry & fishing	1.03
Mining	2.39
Manufacturing	2.01
Electricity, gas & water supply	1.76
Construction	3.83
Wholesale trade	5.72
Retail trade	2.39
Accom., cafes & restaurants	3.60
Transport & storage	4.70
Communication services	11.85
Finance & insurance	-0.37
Property & business services	3.74
Government admin. & defence	3.01
Education	3.15
Health & community services	2.64
Cultural & recreational services	2.54
Personal & other services	3.45
GDP - production based	3.28

Source: ABS *Australian Economic Indicators*, Cat. No. 1350, April 1997

States such as South Australia and Tasmania with a relatively high proportion of GSP in industries growing at rates below the national average rate of growth for all industries (such as agriculture, forestry and fishing and manufacturing), are experiencing GSP growth rates that are substantially below the national average.

The highest growth sector over the five-year period to 1995-96 was communication services which continued to grow strongly in 1995-96 suggesting that there may be some increasing demand for VET in this sector.

There was a high rate of growth for the agriculture, forestry and fishing sector in 1995-96, which reflects the increase in farm production after the extreme drought of 1994-95. However, having the second to lowest average annual growth rate over the period 1991-92 to 1995-96 suggests that this sector is declining relative to other industry sectors in the economy thereby indicating a decline in skill requirements relative to the other sectors.

Although an industry sector may show overall economic decline, it may contain sub-sectors experiencing growth. For example, within the agriculture, forestry and fishing sector, the winegrape industry is experiencing relatively high rates of growth and demands for VET.

The value of construction work in Australia declined in real terms during 1995-96. Increases in the value of non-residential building, engineering construction and non-residential construction were over-shadowed by the sharp decline in residential building activity. It is unlikely that a recovery in residential construction would lead to an increase in the demand for VET as substantial excess labour capacity already exists in this sector. Increases in VET activity may be required for the engineering construction and non-residential construction sectors which have grown since 1994-95, following declines in activity in the early 1990s.

WHAT IS THE STATE OF THE LABOUR MARKET?

Supply Factors

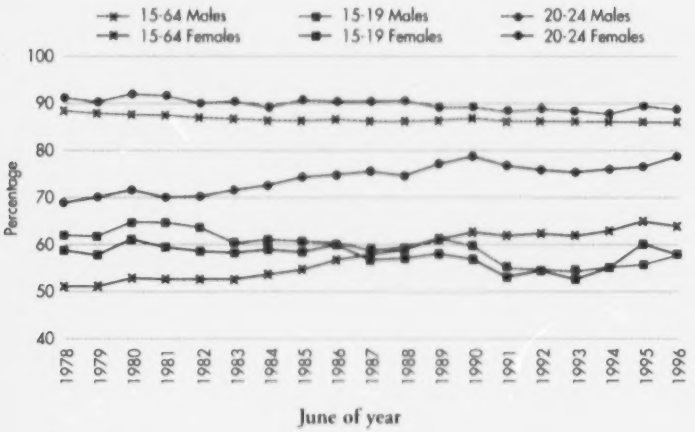
The size and age composition of the labour force has implications for VET. The total labour force grew in size by one per cent between June 1995 and 1996.

As the VET system is a destination for many school leavers, the characteristics of the 15 to 19 year old age group is of particular interest to the VET sector. In June 1996, around two thirds (67 per cent) of the 15 to 19 year old age cohort were engaged in full-time education with 23 per cent employed and engaged in full-time education. A further 23 per cent were employed and not engaged in full-time education. Thus around 90 per cent of the 15 to 19 year old age cohort is engaged in full-time education or employed. Of the remainder, 3.5 per cent are neither in the labour force nor attending education full-time and 6.5 per cent are unemployed and not in full-time education.

The economic recovery has not dampened the rise in trend unemployment which is largely structural in nature. Unemployment at 8.6 per cent in June 1996, although significantly reduced from the high levels of June 1992 and 1993 (11.7 per cent), is still comparatively high when compared with the unemployment rates of the late 1980s (5.8 per cent in June 1989) and late 1970s (6 per cent in June 1979).

Labour force participation rates by age and gender, in June each year, over the period 1978 to 1996 are shown in figure 2.1. Although labour force participation rates for males have, in general, been relatively stable over time, the labour force participation of males in the 15 to 19 year old cohort has declined over the period. There has been no trend increase in the labour force participation rate for females in the 15 to 19 year age cohort over the period despite increases in labour force participation rates for females in the 20 to 24 year old cohort, and for females of working age in general.

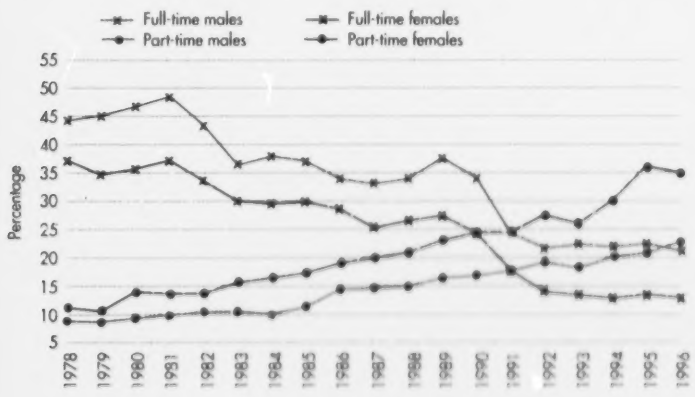
Figure 2.1: Labour Force Participation Rates by Age and Gender



Source: ABS *Labour Force Australia* Cat. Nos. 6204.0 and 6203.0, Feb 1997

The employment status of the 15 to 19 year cohort group has altered dramatically over the period 1978 to 1996. The percentages of the 15 to 19 year age group engaged in full or part-time work are shown in figure 2.2. There is a significant downward trend in the percentage engaged in full-time employment for both males and females over the period. By contrast, the percentage of males, and in particular females, engaged in part-time work over the period has increased dramatically. While 78 per cent[1] of teenagers engaged in part-time employment are also undertaking full-time education, it is unclear to what extent the remainder of this group is receiving any training to prepare them for their future working lives, or the extent of under-employment experienced by this group.

Figure 2.2: Percentage of the 15-19 Year Old Age Group Engaged in Full or Part-time Employment by Gender, Australia, 1978-1996



Source: ABS *Labour Force Australia* Cat. Nos. 6204.0 and 6203.0, Feb 1997

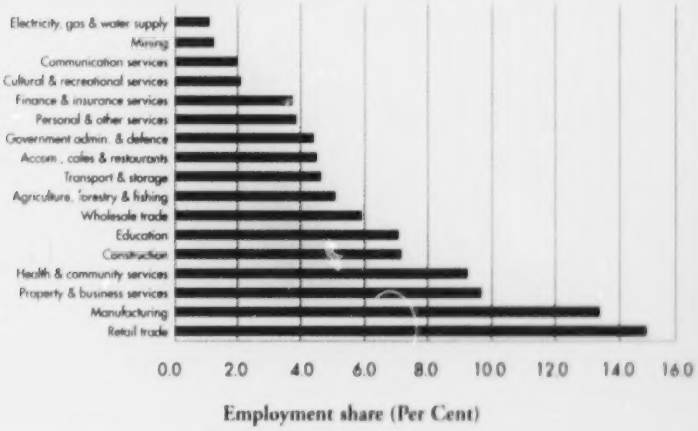
[1] ABS June 1996, Labour Force Australia, Cat. No. 6203.0

Demand Factors

Employment Growth by Industry and Occupation

The distribution of the employed labour force by industry grouping is shown in figure 2.3. The retail trade and manufacturing sectors are the largest employment sectors of the economy followed by the property and business services, health and community services, construction, and education sectors. The largest occupation categories in the economy are sales-persons and personal service workers, clerks and trades-persons (see figure 10.1 in Part C).

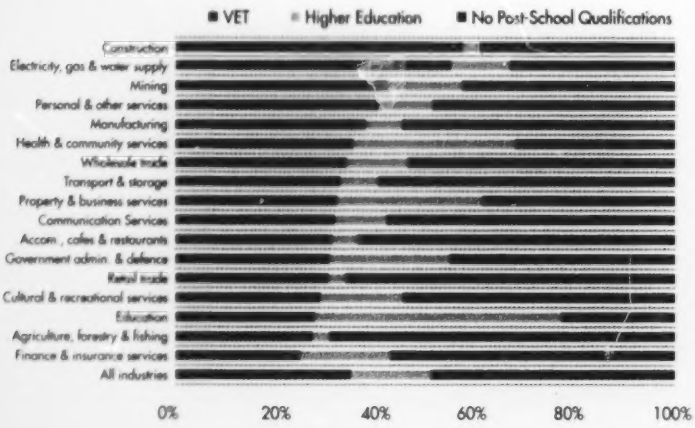
Figure 2.3: Employment Share by Industry Groupings, Australia, May 1996



Source: ABS *Labour Force Australia*, Cat. No. 6203.0

The qualification profile of the Australian workforce by industry sector, as at May 1996, is shown in figure 2.4. Overall, over a third of the Australian workforce held a VET qualification while at least a quarter of the workforce in each industry sector held a VET qualification. Each of the construction and electricity, gas and water supply industries had the greatest percentages, over half, of their workforce with a VET qualification.

Figure 2.4: Qualification Profile of the Australian Workforce Aged 15 to 64 by Industry Sector, 1996



Source: ABS 1996, *Transition from Education to Work Australia*, May 1996, Cat. No. 6227.0

The manufacturing and construction industries together account for over a fifth of national employment. As a substantial number of the workforce in both industries hold VET qualifications on-going demand for training is expected from these industry sectors.

The relative growth or decline in employment by industry provides some indication of the relative future needs of industry for VET although this needs to be balanced against other drivers of training demand.

Over the five-year period 1991-92 to 1995-96, the property and business services sector had the highest employment growth (see table 2.3). With this sector being the third largest employer and over 30 per cent of its workforce holding a VET qualification, relatively high demand for VET by this sector can be expected.

Other sectors experiencing relatively high employment growth include the construction and health and community services sectors.

While the electricity, gas and water supply sector workforce has the second largest percentage of employees with a VET qualification by industry, this sector having the greatest decline in employment growth suggests a possible decrease in demand for VET from this industry group.

The mining sector is becoming relatively more capital but less labour intensive with time. Although the mining sector has experienced negative rates of growth in total labour employed in recent years, it is anticipated that VET requirements will be relatively high due to rising labour productivity bringing increasing demands for skilled labour relative to unskilled labour.

Table 2.3:Average Annual Rate of Growth in Employment by Industry

	Average annual rate of growth Five-year period 1991-92 to 1995-96
Electricity, gas & water supply	-4.78
Finance & insurance	-1.10
Mining	-0.96
Wholesale trade	0.40
Manufacturing	0.47
Agriculture, forestry & fishing	0.68
Transport & storage	0.74
Government admin. & defence	1.67
Personal & other services	1.79
Health & community services	1.82
Education	2.01
Accom., cafes & restaurants	2.25
Retail trade	2.50
Communication services	2.61
Cultural & recreational services	2.92
Construction	3.22
Property & business services	5.73

Source: ABS *Australian Economic Indicators*, Cat. No. 1350, April 1997

The retail trade sector is the dominant employer of young people with almost half of employed 15 to 19 year olds, and a fifth of the 20 to 24 year old cohort, being employed in this sector (see table 2.4). These age groups account for almost 40 per cent of employment in the retail sector.

Table 2.4: Distribution of Age Categories of Employed Persons, by Industry Groupings

	Age group 15-19 years	20-24 years	Over 25 years
Agriculture, forestry & fishing	4.1	3.2	5.5
Mining	0.3	1.0	1.1
Manufacturing	9.6	13.1	13.6
Electricity, gas & water supply	0.1	0.6	1.0
Construction	4.5	6.9	7.4
Wholesale trade	3.1	5.9	6.3
Retail trade	48.6	19.7	11.4
Accom., cafes & restaurants	8.1	7.5	3.8
Transport & storage	1.2	3.9	5.2
Communication services	0.7	1.9	2.1
Finance & insurance	1.3	4.5	4.0
Property & business services	6.0	9.3	10.0
Government admin. & defence	1.2	3.0	4.9
Education	1.2	4.7	8.1
Health & community services	3.5	7.9	9.9
Cultural & recreational services	2.1	2.9	2.0
Personal & other services	4.5	4.1	3.8
Total	100.0	100.0	100.0

Source: ABS *Labour Force Australia* Cat. No. 6203.0, May 1996

With approximately a third of the 15 to 19 age group[1] in full-time education also working part-time, it is to be expected that a substantial number of youth employed in retail trade would be engaged in full-time education, given that this sector is the primary employer of young people. Nevertheless, the remainder employed in this sector will still require a sufficient level of training and skill development to equip them to enter other industry sectors in the future.

[1] Ibid.

What makes up the vocational education and training (VET) sector in Australia and how big is it? Before looking at the information on key performance measures contained in this report, this chapter considers:

- how large and diverse is the VET sector in Australia—the number of clients involved, where they enrol, at what level and for how long
- the annual expenditure on VET and the diversity of providers delivering VET
- apprenticeships and traineeships through the progressive introduction of New Apprenticeships.

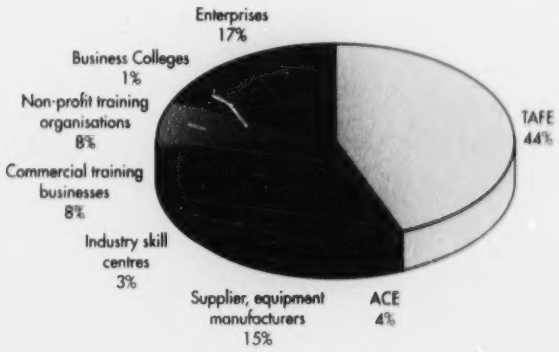
The information provided in this chapter deals predominately with data on VET activity delivered by providers in receipt of public funds from NCVER's 1996 annual collection (see Part C for further details.)*

WHAT IS THE SIZE AND COMPOSITION OF THE VET MARKET?

A valuable over-arching view of who delivers VET and who funds VET is provided in the Allen Consulting Group's *Establishing an Effective Training Market.* This data is not contemporary and therefore changes that have occurred since 1994 will not be included. Nevertheless, it provides the latest available overall picture of the composition of the VET sector.

Figure 3.1 provides estimates of the distribution of VET expenditure in Australia by VET delivery agency, while figure 3.2 identifies the relative contribution to VET funding in Australia by funding source. (For an explanation of the derivation of these estimates, refer to the additional notes in Part C).

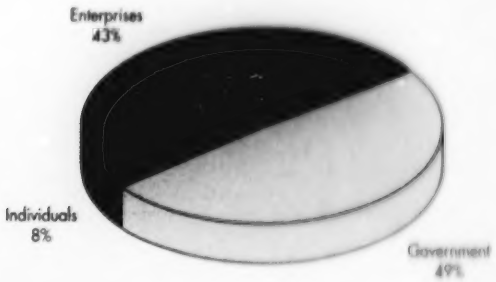
Figure 3.1: Who Delivers VET: Distribution of VET Expenditure



Source: The Allen Consulting Group, *Establishing an Effective Training Market*, 1994

* The exception being the 'What is the Size of and Composition of the VET Market' section which deals with the whole VET market

Figure 3.2: Who Pays for VET: Distribution by Funding Source



Source: The Allen Consulting Group, *Establishing an Effective Training Market*, 1994

While the Allen Consulting Group data provide information on the *whole* VET market, more detailed data on the size and composition of VET activity delivered by providers in receipt of public funds is provided from NCVER's 1996 data collection. This information follows.

As at June 1996, there was a total of 1,354,579 clients in all vocational education and training activities. In 1996, publicly funded vocational programs were delivered by 106 public training institutions, 514 community-based providers, and 397 private providers.

Government funded VET only expenditure in 1996 was estimated to be $2.79 billion, representing an increase of over four per cent from the estimated $2.67 billion in 1995.

HOW DIVERSE IS THE VET MARKET?

The VET sector is particularly diverse given the variety of:

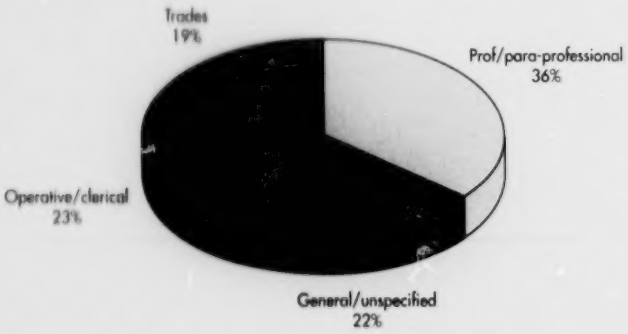
- program types
- fields of study or disciplines
- providers.

Information in this section is based on data from NCVER's national VET collection which focuses predominantly on VET activity delivered by providers in receipt of public funds rather than the whole VET market.

Program Diversity

The VET system does not cater just to a narrow segment of the labour market, rather, it caters to the needs of clients across all occupational categories. The distribution of annual course hours by training level (figure 3.3) shows most activity to be in the professional/para-professional category, with this category accounting for 36 per cent of total annual course hours of VET delivered in Australia in 1996. The operative/clerical training level accounted for the next highest proportion of activity (23 per cent) followed by trades (19 per cent). General or unspecified activity accounted for 22 per cent of all activity.

Figure 3.3: Government Funded Annual Course Hours by Training Level, Australia, 1996



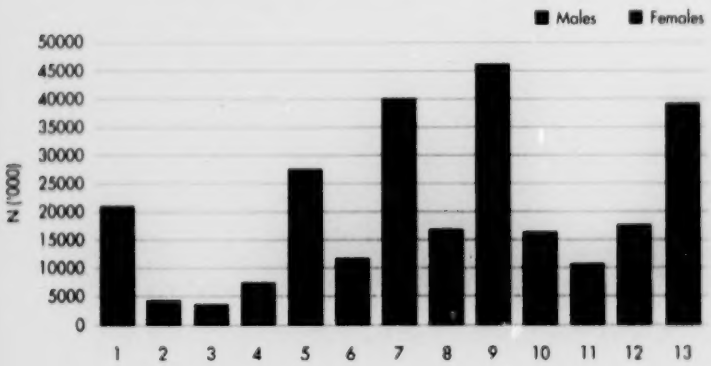
Source: ANTA

Diversity of Disciplines

The VET system provides for training across a very broad range of disciplines, as shown in figure 3.4. The three largest disciplines by module annual hours in 1996 were:

- administration, business, economics, law (17.6 per cent)
- engineering, processing (15.0 per cent)
- social, educational and employment skills (14.7 per cent).

Figure 3.4: Module Annual Hours by Discipline by Sex, Australia, 1996



Discipline group

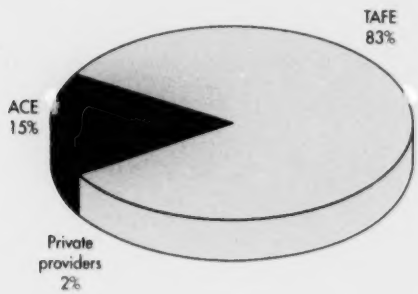
01 Humanities
02 Social Studies
03 Education
04 Sciences
05 Mathematics, Computing
06 Visual/Performing Arts
07 Engineering, Processing
08 Health Sciences
09 Admin., Business, Eco., Law
10 Built Environment
11 Agric., Renewable resources
12 Hospitality, Tourism & Personal services
13 Social, Educational & Employment skills

[7] The training level categories used in figure 3.3 are based on occupational classifications

Provider Diversity

The number of clients in vocational programs in 1996 by provider type is illustrated in figure 3.5. Data for this year captures for the first time some data on publicly funded private providers. In the public arena, TAFE still provides for the largest number of VET clients with 83 per cent of VET clients having their training provided by TAFE while 15 per cent had their training delivered by a community education provider. The data for 1996 suggests that at least two per cent had their training provided by a private provider.

Figure 3.5: VET Clients by Provider Type, Australia, 1996



Source: NCVER 1996 national VET collection

The diversity and complexity of provision for the whole VET market is in fact far more complex than the picture provided above. VET is increasingly being provided in the workplace and to students in the secondary school sector. The provision of VET in the school sector is increasing at a rapid rate and $20 million of VET funds is to be allocated to schools in 1997. Albeit a very small proportion, VET provision is also taking place in the higher education sector and vice versa, for example, the granting of Bachelor degrees through TAFE.

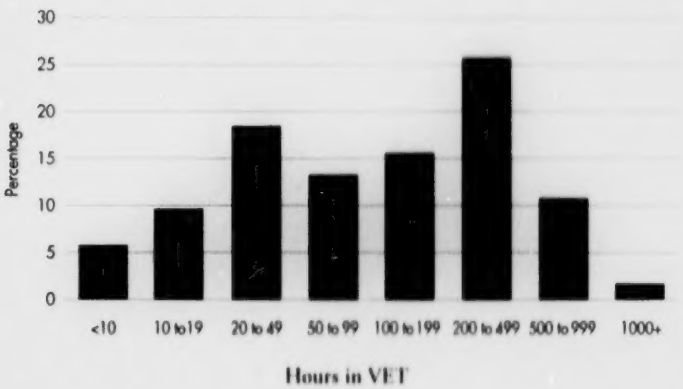
The influence of non-TAFE provision in the VET market is rapidly increasing with the number of private providers estimated to be 1200 in 1994, 1940 in 1995 and 2500 in 1996. The main providers of VET apart from TAFE are employers and commercial training providers. Training provided here is mainly enterprise-specific in-house training, external training provided by an educational institution or commercial provider, or on-the-job training. Other non-TAFE providers may include community education centres, theological colleges, SkillShare programs, professional associations, group training companies, and training provided by other industry bodies.

Time Spent in Training

Not all participants in VET are looking for formal award outcomes or qualifications. What participants in VET are looking for and how well the system meets their expectations, requires further analysis. Some explanations can be found in the analysis of graduate destinations and employer satisfaction in chapters five and six of this report.

In view of this it is interesting to note the distribution of the intensity of training in VET. Around a quarter of clients, 25.6 per cent, spent between 200 to 499 hours in VET in 1996. Just under half of clients, 47.0 per cent, were spread across participation in VET of between 20 to 199 hours. At the extremes, 15.4 per cent were in VET for less than 20 hours and 12.0 per cent in VET for 500 or more hours in 1996.

Figure 3.6: Percentage of Clients by Hours in VET, 1996



Source: NCVER 1996 national VET collection

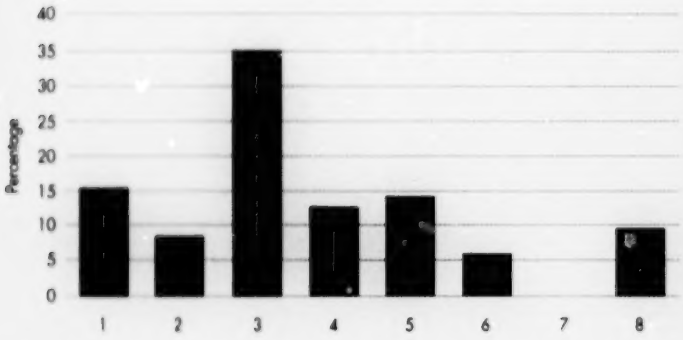
WHAT ARE YOUNG PEOPLE IN TRAINING DOING?

Figure 3.7 shows that most persons aged 15 to 24 years undertaking a vocational program, 90.5 per cent, were enrolled in an award course. Only 9.5 per cent were enrolled in non-award courses.

The qualification levels most commonly enrolled in by clients aged 15 to 24 years were

- AQF Certificates III or equivalent (35.0 per cent)
- diplomas (15.2 per cent), and
- other certificates and statements of attainment (13.7 per cent).

Figure 3.7: Young People's (15 to 24) Participation in VET by Qualification Level, 1996



Qualification Level Code

1 Diplomas
2 AQF Certificate IV and equivalent
3 AQF Certificate III and equivalent
4 AQF Senior secondary & Certificates I & II
5 Other certificates and statements of attainment
6 Endorsements and Others
7 AQF Bachelors Degree
8 Non award courses

Note: See Part C for the recoding of AVETMISS qualification codes into the above groups.

The three fields of study which had the highest number of clients aged 15 to 24 years in 1996 were business, administration, economics (20.7 per cent), TAFE multi-field education (18.5 per cent) and engineering, surveying (13.8 per cent).

Apprenticeships and Traineeships

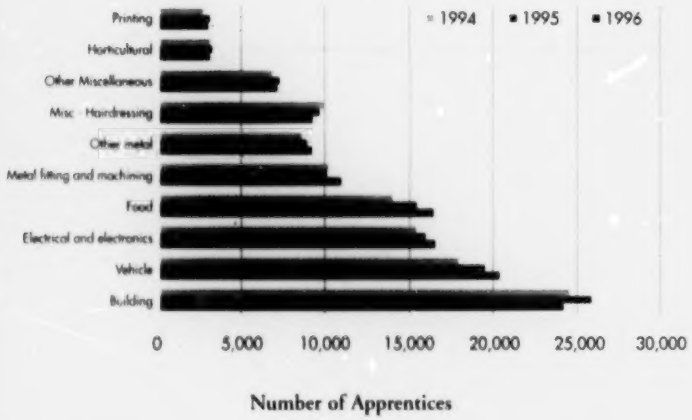
Increasing interest has been placed on the progressive implementation of New Apprenticeships to introduce more flexibilities, new support services and to expand the range of industry sectors offering traineeships and apprenticeships. A key reform will be the introduction of user choice in January 1998. This will enable enterprises and their apprentices/trainees to choose the provider and timing, location and mode of training that suits their needs. Apprenticeships and traineeships are based upon a training agreement between an employer and an individual. The agreement outlines the conditions of employment and training, including the course of instruction or other training as determined by the relevant State/Territory training authority.

There is a clear trend of increasing numbers of overall contracts of training. As at 31 December 1996 there were 161,496 apprentices/trainees in training compared with 127,588 and 138,077 at the same point of time in 1994 and 1995 respectively. However, these increases are due almost entirely to an increase in the number of trainees. The number in training in the trades-persons occupational group increased by only one per cent from 119,168 at 31 December 1995 to 120,156 at the same time in 1996. Those in training in other occupational groups (trainee-ships) increased 119 per cent from 18,909 as at 31 December 1995 to 41,340 at the same in 1996.

Around three quarters, 74.4 per cent, of apprenticeships and traineeships together at 31 December 1996 were located in the trades-persons occupational group. The sales-persons and personal service workers and clerks categories were the next largest with 8.7 and 7.5 per cent of apprenticeships/ traineeships respectively.

Within the trades, the four areas with the greatest number of apprentices were building, vehicle, electrical and electronics, and food (see figure 3.8).

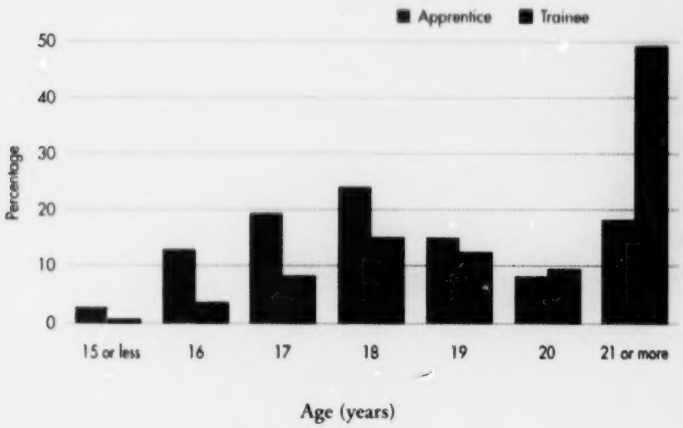
Figure 3.8: Apprentices by Trades-persons ASCO Sub-groups, 31 Dec 1994, 1995, 1996, Australia



Source: NCVER 1996, Australian training statistics, 1994-95, 1995-96 and 1996-97 Quarter 2
Note: As this data is of those in training, not commencements, it is point in time data.

Dis-aggregating commencements in the period 1 January to 31 December 1996 by apprenticeship and traineeship reveals a much older age profile of trainees compared with apprentices (figure 3.9). Around half of trainees, 49.6 per cent, were aged over 20 years compared with only 18.2 per cent of apprentices.

Figure 3.9: Age of Those Commencing Apprenticeships or Traineeships, 1996, Australia



Source: NCVER, Australian training statistics

Considering all apprenticeship and traineeship commencements for the period 1 January to 31 March together reveals an increase in the percentage of those aged over 20 years. This group has increased from 13 per cent in 1995 to 23 per cent in 1996. This increase is due mainly to the increase of traineeships undertaken by people aged over 20 years.

PART B

KEY PERFORMANCE MEASURES

The key performance measure discussed in this chapter, participation, is an important measure of the level and equity of activity in the vocational education and training sector. While looking at participation rates by age and sex, the participation of other particular client target groups are also investigated including Aboriginal and Torres Strait Islander people, non-English speaking background people, rural and remote people, and people with a disability. The participation of these various groups is investigated by State/Territory.

Participation in vocational education and training relative to participation in the other main education sectors, namely, school and higher education, is also investigated. It also looks at the level of unmet student demand for VET and compares this to unmet demand in the higher education sector.

Participation rates for a particular group, where used in this chapter, refer to the number of people in that target group in VET compared with (divided by) the total numbers of that target group in the community.

Also incorporated in this chapter are updated data on the monitoring of the Finn targets.

What are Overall Participation Rates in VET?

Overall participation rates for VET activity delivered by providers in receipt of public funds are shown in table 4.1 by sex and State/Territory. (More detailed participation data by age, sex and State/Territory are provided in tables 10.5, 10.6 and 10.7 in Part C.)

Table 4.1: VET Participation Rates by Sex and State, 15 to 64 Year Olds, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Females	10.7	10.3	7.4	9.2	7.8	6.6	11.5	7.1	9.4
Males	10.2	14.1	9.0	9.3	8.7	8.4	12.7	8.0	10.4
All persons	10.5	12.1	8.2	9.2	8.2	7.5	12.1	7.6	9.9

Source: Derived using NCVER data and ABS Estimated Resident Population by Sex/Age, June 1996 (Cat. No. 3101.0)

These data show that male participation is still higher than female participation.

HOW DO 1996 OVERALL PARTICIPATION RATES IN VET COMPARE WITH 1995?

Table 4.2 compares 1996 overall participation rates in VET with those of 1995. In order to be able to make meaningful comparisons, the 1996 data has been further adjusted to the same scope and boundary that applied to the 1995 data.

Indications are that overall participation rates have increased slightly although while some States have experienced growth in participation (New South Wales, Victoria and Tasmania), some other States and Territories have experienced a decline in participation (South Australia, Western Australia and the Australian Capital Territory).

Table 4.2: Comparison of 1995 and 1996 VET Participation Rates*, 15 to 64 Year Olds

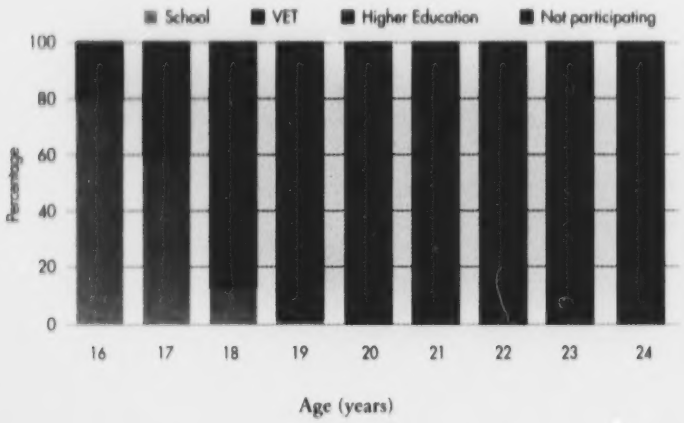
	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
1995	9.6	10.6	8.1	9.4	8.5	6.8	8.8	7.4	9.4
1996*	10.4	12.0	8.1	8.9	8.2	6.9	8.8	7.3	9.7

*1996 data have been adjusted to the same scope and boundary as 1995 data hence the figures differ from those in table 4.1 above.
Derived using NCVER 1995 and 1996 adjusted data with 1996 data further adjusted to the same scope and boundary for 1995 data, and ABS population data for June 1995 and 1996

WHAT IS PARTICIPATION IN VET RELATIVE TO OTHER EDUCATION SECTORS?

Focussing on the 16 to 24 year old cohort, clearly the schools sector accounts for the majority of persons participating in education up to and including the age of 17 years. From age 18 to 24 years, there is a steady increase in the percentage not participating in education from 32 per cent to 79 per cent. For all ages between 16 and 24, participation in VET is higher than participation in higher education.

Figure 4.1: Participation in Education and Training for the 15-24 Age Group, Australia, 1996



Source: ABS *Estimated Resident Population* (population), ABS *Schools Australia* (schools), NCVER *Australian VET Statistics 1996* (VET), DEETYA *Selected Higher Education Student Statistics 1996* (Higher Education)

WHAT UNMET STUDENT DEMAND IS THERE FOR VET?

For each of the VET and higher education sectors, table 4.3 presents the percentages of those who applied for a placement in 1996 who were attending, gained a placement but deferred, or were unable to gain a placement as at May 1996, by age.

The figures suggest that there is a greater unmet demand for VET than there is for higher education with 8.3 per cent of VET placement seekers being unable to gain a VET placement compared with 3.1 per cent of those seeking a higher education placement being unable to gain one.

Table 4.3: Unmet Demand for Each of VET and Higher Education: Of Those Who Applied for a Placement in 1996, Percentages Attending, Gaining, and Not Gaining a Placement by Age, Australia, May 1996

	VET*			
	Attending %	Gained placement but deferred %	Unable to gain placement %	Total %
15 to 19	81.6	9.2	9.2	100.0
20 to 24	81.7	12.7	5.5	100.0
25 to 64	73.2	17.7	9.2	100.0
All persons	**76.8**	**14.9**	**8.3**	**100.0**
	Higher Education			
	Attending %	Gained placement but deferred %	Unable to gain placement %	Total %
15 to 19	91.6	6.1	2.3	100.0
20 to 24	94.9	3.0	2.1	100.0
25 to 64	86.1	9.7	4.3	100.0
All persons	90.1	6.8	3.1	100.0

*"VET" includes TAFE, business colleges, industry skills centres and other educational institutions

Source: ABS Transition from Education to Work, Cat. No. 6227.0

ARE MORE YOUNG PEOPLE PARTICIPATING IN TRAINING?

The monitoring of young peoples' participation in post-compulsory education and training continues with respect to the Finn targets*. Longitudinal participation data of 19 and 22 year olds from 1990 to 1996 are provided in figure 4.2 along with the projected participation trends and the Finn targets for the year 2001.

Figure 4.2: Monitoring Young Peoples' Participation in Post-Compulsory Education and Training

Source: Derived by the ANTA from unpublished data from ABS Transition from Education to Work, Cat. No. 6227.0

* So named after Brian Finn AO, the chair of the committee which produced the Finn report.

The trends to date suggest that there is a good chance that the Finn targets for 22 year olds will be met in 2001. However, indications are that if the current participation trend for 19 year olds continues, the Finn target for this age cohort will not be met in 2001. A number of factors have contributed to the fall in participation for this group from 1995 to 1996 including a decline in the apparent completion rates for upper secondary schooling and a reduction in persons who have attained qualifications and are not continuing with further education and training.

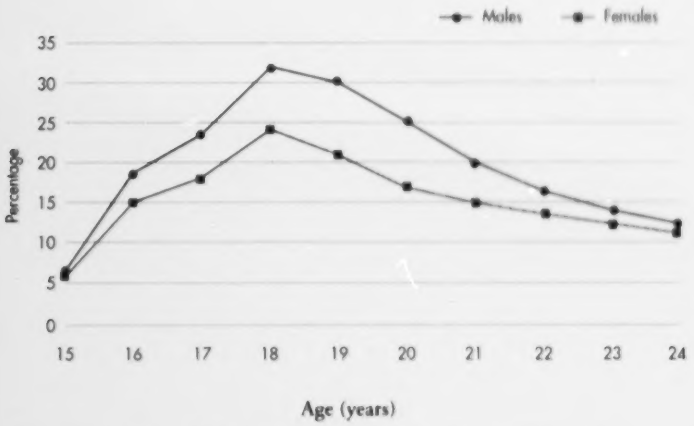
The 1996 data for the 19 year old cohort needs to be treated with caution given some inconsistencies of ABS Transition from Education to Work data compared with some institutional data and changes in ABS survey methodology*.

Participation data for the 19 year old cohort from higher education and VET institutional collections reveal an increase in participation from 1995 to 1996 of one per cent while the ABS survey reported a decrease in participation of three per cent over the same period. It is not possible, however, to verify from any other data source the number of 19 year old persons with attainment but not attending, or those who have completed their highest level of secondary education and are not attending or who have attained a post-school qualification.

The remainder of this chapter utilises data from NCVER's 1996 collection only and is thus indicative of participation in predominately publicly funded or subsided VET only and not of the *whole* VET system.

Data on VET activity delivered by providers in receipt of public funds shows that people aged 17 to 21 years are clearly the most likely to be participating with around a fifth or more of this cohort of the population doing so. As figure 4.3 illustrates, males generally still have higher participation rates than females, particularly for the 16 to 22 year old age cohort. More detailed participation data by age, gender and State/Territory are provided in tables 10.5, 10.6 and 10.7 in Part C.

Figure 4.3: VET Participation Rates by Age, Australia, 1996



Source: Derived using NCVER data for clients and ABS population data

* Changes in the ABS Transition from Education to Work survey methodology regarding courses of short duration (less than on semester or 200 hours equivalent full-time) may also contribute to an apparent fall in the participation of 19 year olds on 1996.

WHAT IS THE PARTICIPATION OF INDIVIDUAL CLIENT GROUPS?

This section looks at 1996 participation in VET by the following individual client groups:

- people from rural and remote areas
- Aboriginal and Torres Strait Islander people
- non-English speaking background people (language spoken at home and country of birth)
- people with a disability.

Improving the participation of people from these client target groups has been and will continue to be an ongoing strategic element in the national goals for VET. Ongoing monitoring of the participation of these groups is undertaken to measure if strategies put in place to increase participation are delivering the desired results.

People from Rural and Remote Areas

Table 4.4: VET Participation Rates by Region (All Ages), 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Capital city	7.1	7.3	5.5	6.1	5.3	5.1	11.7	5.4	6.6
Other metropolitan	7.0	7.8	5.7	-	-	-	-	-	6.7
Rural	8.1	11.4	5.6	6.6	6.2	4.6	7.2	-	7.9
Remote	6.5	20.5	6.0	11.5	8.3	14.0	11.4	-	8.3
All persons*	7.8	8.5	5.7	6.4	5.8	5.0	11.7	5.9	7.2

Source: Derived using NCVER data for clients and ABS population data
*Total participation rates here differ from others due to being based on all ages rather than the 15 to 64 year old age cohort, as has been used in previous tables.

Attempts to monitor the participation of the following target groups rely on the self-identification of people as a member of these groups via their enrolment forms. As there are a substantial number of people who choose not to answer questions on their enrolment form which identify their ethnicity, aboriginality or disability, the following data is indicative only of the participation rates of the various target groups.

Aboriginal and Torres Strait Islander People

The information provided in table 4.5 indicates that *a minimum* of 2.4 per cent of the VET population identify as being of Aboriginal or Torres Strait Islander origin which is well above the corresponding 2.0 per cent of the total population. Given that over 23 per cent of VET clients did not report whether they identified as indigenous or not, it would be expected that the participation of indigenous people is higher than 2.4 per cent. Using only data for which identification was reported, an estimate of overall participation is derived as 3.1 per cent.

Table 4.5: VET Participation by Indigenous Identification by State/Territory, All Ages, 1996, (Per Cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Students reported as indigenous	2.2	0.7	3.0	2.3	3.6	2.6	25.3	1.3	2.4
Students reported as non-indigenous	77.5	78.1	72.4	61.7	55.2	91.8	46.3	89.8	73.9
Students with client group not reported	20.3	21.1	24.5	35.9	41.2	5.6	28.5	8.8	23.7
Indigenous peoples as proportion of total population	1.7	0.5	2.8	1.4	2.9	3.0	23.7	1.0	2.0

Source: Derived using NCVER data for clients and ABS 1996 Census data

However, although indigenous people may be well represented in VET overall, they tend to be in lower level and shorter courses compared with non-indigenous persons.

Non-English Speaking Background People

Table 4.6: VET Participation by Language Spoken at Home, All Ages, 1996, (Per Cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Students who reported speaking a language other than English at home	16.9	13.3	6.4	9.8	11.7	5.1	7.7	21.3	13.1
Students who reported speaking only English at home	62.3	63.0	52.5	52.5	54.2	11.3	36.4	70.1	58.5
Students with client group not reported	20.8	23.6	41.1	37.6	34.1	83.6	55.9	8.6	28.4
Persons who speak a language other than English at home as proportion of total population	16.8	18.7	6.3	11.4	10.6	3.1	20.6	12.8	13.9

Source: Derived using NCVER data for clients and ABS 1996 Census data

Overall for Australia, 13.1 per cent of the VET population reported that they spoke a language other than English at home. Given that over a quarter of clients did not indicate whether or not they spoke a language other than English at home, the above figure represents a minimum percentage. An estimate of the actual percentage of non-English speaking VET clients of 18.3 per cent may be derived from the reported language spoken data.

As the corresponding proportion of the Australian population who speak a language other than English at home is 13.9 per cent, indications are that non-English speaking background persons are at least equally participating in VET when compared with their proportion in the general population.

Table 4.7: VET Participation by Country of Birth (Main English Speaking or Otherwise), All Ages, 1996 (Per Cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Students who reported being born in a non-English speaking country	15.4	13.5	9.2	10.0	11.4	6.4	3.3	18.3	12.9
Students who reported being born in a main English speaking country	64.5	64.0	75.9	55.5	54.6	92.0	65.3	73.2	65.1
Students with client group not reported	20.1	22.5	15.0	34.5	34.0	1.6	31.3	8.5	22.0
Persons born in a non-English speaking country as a proportion of total population	15.7	17.0	7.2	10.6	11.7	3.9	7.9	13.7	13.2

Source: Derived using NCVER data for clients and ABS 1996 Census data

Similarly, although 12.9 per cent of clients specifically reported being born in a non-English speaking country, an estimate of the actual percentage of VET clients born in a non-English speaking country of 16.5 per cent may be derived from the data where clients reported their country of birth.

As 13.2 per cent of the Australian population were born in a non-English speaking country, indications are that those born in a non-English speaking country are at least equally participating in VET when compared with their proportion in the general population.

Although the data indicate that non-English speaking background people are on the whole at least equally participating in VET compared with others, they nevertheless tend to be over-represented in the lower skill level preparatory courses and are under-represented in operatives, trades and skilled level courses.

People with a Disability

Table 4.8: VET Participation by Reported Disability, All Ages, 1996, (Per Cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Students reported as having a disability	3.7	4.2	3.1	2.8	1.5	4.5	1.5	4.4	3.5
Students reported as not having a disability	65.1	67.7	80.8	55.3	31.6	83.9	46.5	76.0	64.8
Students with client group not reported	31.2	28.0	16.1	41.9	66.9	11.6	52.0	19.6	31.7
Persons with a disability as a proportion of total population	13.4	15.0	16.9	16.2	16.2	15.6	13.5	14.6	15.0

Source: Derived using NCVER data for clients and ABS population data

Only 3.5 per cent of VET clients reported having a disability. Although 31.7 per cent did not report whether or not they had a disability, even based on an estimate of the percentage of clients that had a disability, namely 5.1 per cent, indications are that people with a disability are substantially under-represented in VET when compared with their proportion in the general population of 15.0 per cent[10].

Relative to those not reporting a disability, the participation in VET of those doing so is also skewed towards the lower skill level courses.

[10] However, due to the problems associated with individuals reporting themselves as disabled, the extent of under-representation may not be as severe as these data imply

Consideration of the benefits and outcomes sought or required of Australia's vocational education and training system involves the satisfaction of the needs of two main client groups, namely, students who directly undertake VET and employers and industry who benefit from the skills attained by these students. The two major surveys *1995 VET Graduate Destination Survey* and the *National Employer Satisfaction Survey* provide information on the outcomes attained for the student and employer/industry client groups respectively.

This chapter analyses data from the *1995 VET Graduate Destination Survey*[11].

The *1995 Benchmarking VET* report examined graduate employment outcomes, further study undertaken after graduation, satisfaction with the course and outcomes for particular client groups such as the Aboriginal community, people from non-English speaking backgrounds, women and people living outside capital cities.

As this survey was not conducted in 1996, this report will further analyse the 1995 survey data by investigating graduate outcomes by industry and occupation groupings, fields of study and employer size. As the data from this survey is two years old, the results may not be indicative of the destinations of more recent TAFE graduates. Next year's report will use 1997 graduate survey results to provide an up-to-date picture of graduates' views and outcomes along with indications of any changes since 1995.

The *1995 VET Graduate Destination Survey* data deals with TAFE graduates only. Questionnaires were sent to all graduates who completed a TAFE course leading to an award during 1994, a total of 106,000 persons. Almost 65,000 responses were received, representing a response rate of 61 per cent. A summary of the key findings of this survey is provided in table 10.9 in Part C.

DOES TAFE IMPROVE LABOUR MARKET PROSPECTS?

Over half of the TAFE graduates, 59 per cent, were employed just prior to undertaking their TAFE course. Of these, 36 per cent were in full-time work and 23 per cent in part-time work. This pattern of employment continued through graduates' period of study with 37 per cent working full-time during their final semester of study and 24 per cent part-time. Just over a fifth of graduates, 23 per cent, held the same job before, during and after their TAFE course thereby providing a further example of students combining work and study. Figure 5.1 illustrates the work patterns of TAFE students combining work and study.

Figure 5.2 shows graduates' labour market status at the time of the survey which was some six months after graduates had completed their TAFE course. Just under three quarters, 73 per cent, of graduates were employed, 52 per cent full-time and 18 per cent part-time. Only 15 per cent of graduates were unemployed while 12 per cent were not in the labour force.

This low percentage not in the labour force indicates the very high overall labour force participation rate of TAFE graduates.

[11] Chapter six looks at employers' views on VET through data obtained from the *1995 National Employer Satisfaction Survey*.

Figure 5.1: Graduate Work Patterns Before, During and After Study

Source: Derived from *1995 VET Graduate Destination Survey*

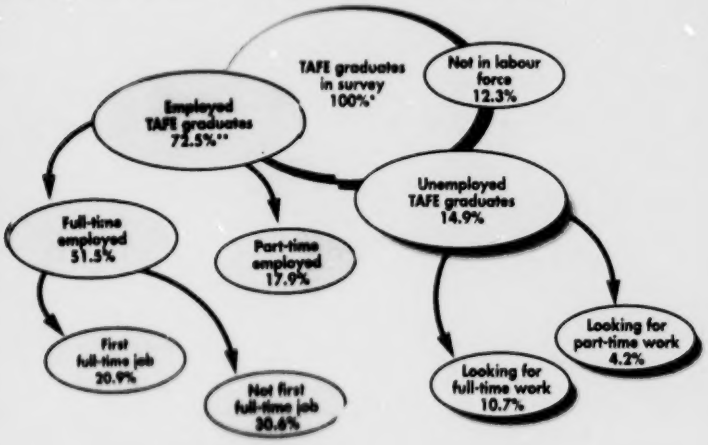
*Numbers differ due to being based on valid responses only for each question.

It is interesting to compare TAFE graduate labour force status data with higher education graduate data from the Graduate Careers Council of Australia (GCCA) *1995 Graduate Destination Survey*. The 1995 GCCA survey found that 79 per cent of graduates were employed, 17 per cent unemployed, and four per cent not in the labour force after graduation compared with 73, 15 and 12 per cent respectively for TAFE graduates. Similar percentages of the higher education and TAFE graduate samples, 42 and 37 per cent respectively, were engaged in full-time employment during their final year or semester of study respectively. Thus higher education graduates were found to have greater percentages employed and unemployed compared with TAFE graduates but a lower percentage not in the labour force.

Focusing again on the TAFE graduate survey, the majority of graduates, 71 per cent, were employed in the private sector and 51 per cent in businesses with more than 100 employees. The overwhelming majority of graduates, 90 per cent, were employees of a business or government organisation while two per cent were self-employed and one per cent were themselves an employer. Only a quarter of employees were employed on a casual basis (and not entitled to holiday or sick leave provisions).

Graduates most likely to be in full-time employment were those from the architecture building, engineering surveying and land and marine resources fields of study with 77 per cent, 77 per cent and 58 per cent being full-time employed respectively. The fields of study where graduates were more likely to still be looking for work six months after completing their courses were science, veterinary science, animal care (20 per cent) and arts, humanities (16 per cent). (See table 10.10 for more information).

Figure 5.2: TAFE Graduate Employment Outcomes, May 1995


TAFE graduates in survey 100%*
Not in labour force 12.3%
Employed TAFE graduates 72.5%**
Unemployed TAFE graduates 14.9%
Full-time employed 51.5%
Part-time employed 17.9%
Looking for part-time work 4.2%
First full-time job 20.9%
Not first full-time job 30.6%
Looking for full-time work 10.7%

Source: Derived from 1995 VET *Graduate Destination Survey*
*Includes unknown labour force status
**Includes unknown full or part-time employed

WHERE ARE TAFE GRADUATES EMPLOYED?

Industry of Employment

The industries that employed most TAFE students graduating from their courses in Australia during 1994 were retail trade (13 per cent), manufacturing (13 per cent), and health and community services (12 per cent), this being consistent with these industries having the greatest employment shares of the Australian workforce (see chapter 2). The industries with most full-time employed graduates were manufacturing (16 per cent), construction (11 per cent), and retail trade (ten per cent). Those industries with the greatest percentage of part-time employed graduates were retail trade (22 per cent), health and community services (18 per cent), and accommodation, restaurants, cafes (14 per cent).

Figure 5.3 illustrates the distribution of employed TAFE graduates by industry groupings and identifies graduates in their first full-time job, those in a full-time job not for the first time, and part-time job holders.

Table 5.1 indicates that industries such as electricity, water, gas; personal services; accommodation, restaurants, cafes; and health and community services employed proportionately more TAFE graduates than other industries when compared with the employment share of these industries in the Australian population generally. (The calculated index in the table indicates the relative employment share of TAFE graduates against the total employment share for individual industries.) Conversely, the wholesale trade; transport and storage; communication services; and agriculture, forestry and fishing industries employed proportionately fewer TAFE graduates when compared with the employment share of these industries in the general population.

Figure 5.3: Industry of Employed TAFE Graduates, May 1995

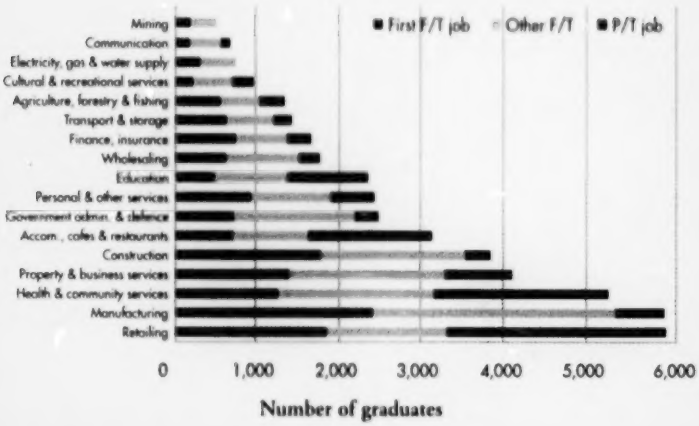


Table 5.1: TAFE Graduates: Industry Participation, May 1995

	% TAFE Graduates	% Persons employed Australia	% With VET qual's	(% Graduates)/(% Employed Australia)*
Electricity, gas and water supply	1.5	0.9	1.4	1.58
Personal and other services	5.4	3.5	4.4	1.57
Accommodation, cafes and restaurants	7.2	4.8	4.0	1.51
Health and community services	12.1	9.0	9.6	1.34
Government administration and defence	5.6	4.5	3.9	1.24
Construction	8.7	7.2	12.6	1.20
Manufacturing	13.3	13.6	14.8	0.97
Finance and insurance services	3.6	3.8	2.8	0.95
Property and business services	9.3	9.8	8.8	0.95
Mining	1.0	1.1	1.4	0.91
Retail trade	13.3	14.7	12.0	0.91
Cultural and recreational services	2.2	2.4	1.8	0.91
Education	5.3	7.3	5.9	0.73
Agriculture, forestry and fishing	3.0	4.3	3.6	0.71
Communication services	1.3	1.9	2.0	0.69
Transport and storage	3.2	4.8	4.9	0.66
Wholesale trade	3.9	6.4	6.1	0.61

*Values >1.00 indicate over-representation, values <1.00 under-representation.
Sources: ABS, *1995 VET Graduate Destination Survey*, ABS 1995, *Transition from Education to Work Australia*, May 1995, May 1996,Cat. No. 6227.0.40.001

Industry provides much training of its own and utilises other providers and this is not reflected in the index. The index may also indicate where the TAFE sector can perhaps play a larger role in the training market.

It is useful to compare the distribution of TAFE graduates with the distribution of those with VET qualifications as a whole to assess if graduates are being employed in the growth sectors of the economy (see table 5.1). Although the employment distribution of TAFE graduates broadly mirrors the distribution of those with VET qualifications as a whole, there are some notable differences in the employment of graduates: a substantial decline in the relative proportion of

graduates employed in the construction industry; a relative increase in the proportion employed in the health and community services; personal and other services; property and business services; and accommodation, cafes and restaurants sectors; and a relatively small decline in the proportion employed in the manufacturing industry. The small relative increase in the proportion employed in the retail sector can be attributed to differences in the age structure of the two populations. Unexpectedly, there is relatively little difference between the proportion of graduates employed in the communications sector compared with those with VET qualifications as a whole. The communications sector has exhibited the strongest output growth in the economy in recent years (see discussion of the economic outlook in chapter 2).

Enterprise Size

Table 5.2 investigates the distribution of TAFE graduates and employed persons generally by size of enterprise. Although the general Australian data looks only at persons employed in the private sector while the TAFE graduate data also includes those employed in the government sector, comparing these two distributions nevertheless indicates that new graduates are over-represented in enterprises with less than 10 employees compared with the population generally and are under-represented in enterprises with 20 to 99 employees.

Table 5.2: Employed TAFE Graduates by Enterprise Size

	Graduates employed at 31 May 1995	% Employed persons, Australia*	(% Employed graduates)/ (% Employed population)**
Less than 10	26.4	22.6	1.17
10 to 19	9.1	11.1	0.82
20 to 99	13.5	22.3	0.61
100 or more	51.0	44.0	1.16
Total	100.0	100.0	

*Private sector employees only

**Values >1.00 suggest over-representation, values <1.00 under-representation.

Sources:ABS 1995, *1995 VET Graduate Destination Survey*; ABS 1996, *Small business in Australia 1995*, Cat. No. 1321.0

In interpreting these results it is useful to consider the characteristics of enterprises with less than 10 employees. Of this population of businesses, most (85 per cent) are classified as very small businesses (less than 5 employees). These businesses are concentrated in the construction, retail trade and property and business services industries. These sectors employed 31 per cent of TAFE graduates in May 1995 (see table 5.1).

WHAT ARE OCCUPATIONAL OUTCOMES FOR GRADUATES?

Over a quarter of employed graduates, 26 per cent, reported their occupation as trades-persons followed by sales-persons and personal service workers (20 per cent), and clerks (18 per cent). As would be expected, table 5.3 indicates a large over-representation of TAFE graduates in the trades-persons occupation category when compared with the percentage of trades-persons in the workforce generally. TAFE graduates were similarly over-represented in the para-professionals occupation category. The occupation categories where TAFE graduates were most under-represented were the plant and machine operators, and drivers and labourers and related workers categories.

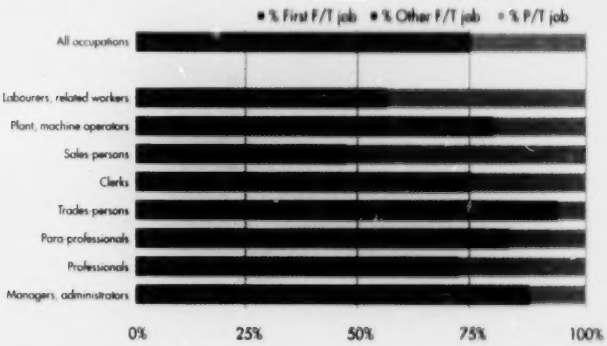
Graduates in the trades-persons occupation category were clearly the most likely to be in their first full-time job after graduation with 51 per cent in this category (see figure 5.4). Graduates from the sales-persons, labourers and related workers and professionals occupation groups were the most likely to be engaged in part-time employment after graduation with 51 per cent and 44 per cent in these groups respectively.

Table 5.3: Occupations of TAFE Graduates, May 1995

	% Employed graduates	% Employed population	(% Employed graduates)/ (% Employed population)*
Plant and machine operators, and drivers	2.4	7.2	0.34
Labourers and related workers	7.9	14.8	0.54
Professionals	8.5	14.1	0.60
Managers and administrators	6.5	10.3	0.63
Clerks	18.2	16.6	1.10
Sales-persons and personal service workers	20.4	17.0	1.20
Para-professionals	9.9	5.6	1.78
Trades-persons	26.2	14.6	1.80
Total	100.0	100.0	

*Values >1.00 indicate over-representation, values <1.00 under-representation.
Sources: ABS 1995, 1995 VET *Graduate Destination Survey*; ABS 1996, *Transition from Education to Work Australia*, May1995, Cat. No. 6227.0

Figure 5.4: Employment Patterns of TAFE Graduates by Occupation, May 1995



Perhaps unexpectedly, those in the professional occupation category were third most likely to be engaged in part-time employment (28 per cent) indicating that this group may be more inclined or have the opportunity to work part-time and study, perhaps in the same field as their work, in order to upgrade their qualifications.

HOW RELEVANT WERE TAFE STUDIES TO WORK?

Overall, graduates reported that their courses were highly relevant or of some relevance to their jobs in 73 per cent of cases. The percentages of graduates rating their course to be highly relevant or of some relevance to their employment are shown by industry of employment in table 5.4. Those industries with the largest proportions of graduates rating their course to be relevant were:

- construction (88 per cent)
- electricity, gas, water (87 per cent)
- personal, other services (85 per cent), and
- mining (85 per cent).

Table 5.4: Relevance of Course Completed to Industry Graduate Employed, May 1995

	Course 'highly relevant or of 'some relevance' (%)
Construction	87.8
Electricity, gas, water supply	86.8
Personal, other services	85.2
Mining	84.7
Health, community services	80.7
Property, business services	79.9
Manufacturing	78.3
Government administration, defence	78.1
Transport, storage	77.3
Education	76.3
Agriculture, forestry, fishing	76.1
Wholesale Trade	74.0
Accommodation, cafes, restaurants	73.0
Culture, recreation services	72.9
Finance, insurance	70.1
Communication services	64.1
Retail Trade	58.4
All industries	72.9

The retail trade (28 per cent) and communications industries (21 per cent) both reported higher levels of 'not at all relevant' than other industries, the all industries average for 'not at all relevant' responses being 14 per cent. This would perhaps indicate that many graduates use the retail trade for stop-gap employment and part-time employment while seeking jobs related to their courses.

The relevance of courses to graduates' employment depends largely on whether graduates are in jobs related to their studies at TAFE. For that reason, as might be expected, those in the trades-person category reported the highest percentage of 'highly relevant' responses (74 per cent). The para-professionals (57 per cent) and the professional occupation groups (51 per cent) were the next most likely to indicate high relevance. The three occupation areas where graduates indicated the highest levels of their studies having 'no relevance' to employment were:

- plant and machine operators (36 per cent)
- labourers (35 per cent), and
- sales-persons (22 per cent).

The retail trade (28 per cent) and communications industries (21 per cent) both reported higher levels of 'not at all relevant' than other industries.

WHAT WERE GRADUATE OUTCOMES BY FIELD OF STUDY?

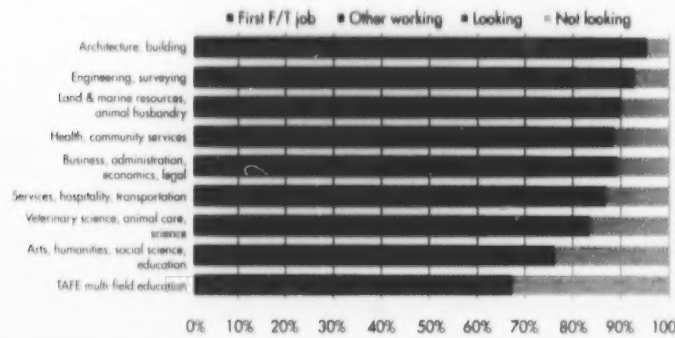
The three fields of study from which graduates were most likely to be in employment after graduation were:

- architecture, building (87 per cent employed)
- engineering, surveying (84 per cent), and
- land and marine resources, animal husbandry (76 per cent)

while the three fields of study with the lowest percentages of graduates in employment were:

- TAFE multi-field eduction (35 per cent employed)
- arts, humanities, social sciences, education (60 per cent), and
- veterinary science, animal care, science (63 per cent).

Figure 5.5: Graduate Employment Status by Field of Study, May 1995



The three fields of study with the lowest proportions of employed graduates also had respectively the largest proportions of graduates not looking for work.

Graduates were generally choosing their courses to suit their job aspirations and the courses appear to be delivering to graduate expectations. The three fields of study with the highest percentages of graduates reporting that their course was highly relevant to their present job were:

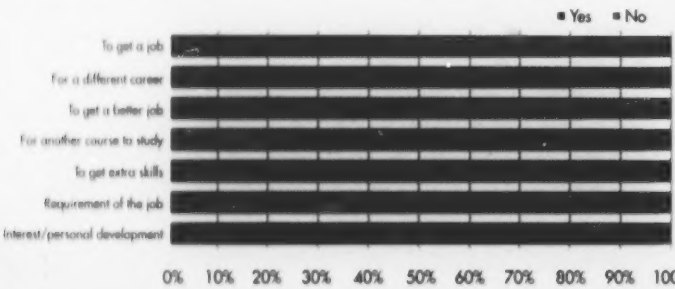
- architecture, building (68 per cent)
- health and community services (63 per cent), and
- engineering, surveying (63 per cent).

The 14 per cent of graduates who reported that their course was not at all relevant to their job may be graduates who undertook courses that did not deliver to their expectations or who deliberately undertook a course not related to their employment.

WERE REASONS FOR STUDYING ACHIEVED?

Figure 5.6 illustrates the high level of satisfaction that graduates had with achieving their reasons for undertaking their TAFE course. Of those who considered 'to get a job' the primary reason for undertaking their course of study, around 80 per cent claimed that this reason was achieved.

Figure 5.6: Whether Achieved Reason for Doing Course, May 1995



This chapter analyses data from the *National Employer Satisfaction Survey of 1995*.

The *1995 Benchmarking VET* report presented from this survey of 2000 establishments around Australia, employers' general views on and satisfaction with vocational education and training in Australia.

Due to this survey not being conducted in 1996, this report will further analyse employers' satisfaction, attitudes and use of providers with respect to the vocational education and training system by industry and employer size. Next year's report will use 1997 employer survey results to provide an up-to-date picture of employers' views along with indications of any changes from 1995.

As mentioned previously, the *National Employer Satisfaction Survey* data involves TAFE and non-TAFE provision of training while the *1995 VET Graduate Destination Survey* data included only TAFE graduates.

HOW SATISFIED ARE INDUSTRY GROUPS WITH VET?

Employers were asked to rate on a 10-point scale from very dissatisfied to very satisfied, their overall satisfaction with training provided. Mean employer overall satisfaction scores by industry for this single question are provided in table 6.1. Clearly, the vast majority of industry areas indicated to the satisfaction side of the scale with (as might be expected) education providing the highest score of 8.2.

Table 6.1: Overall Employer Satisfaction with VET by Industry

	Mean score
Education	8.2
Electricity, gas, water supply	7.7
Agriculture, forestry and fishing	7.4
Personal and other services	7.3
Construction	7.0
Manufacturing	6.9
Transport and storage	6.9
Accommodation, cafes and restaurants	6.8
Health and community services	6.8
Finance and insurance services	6.6
Cultural and recreational services	6.6
Wholesale Trade	6.2
Retail Trade	6.2
Government administration and defence	6.2
Property and business services	6.1
Mining	5.6
Communication services	4.6
All industries	6.6

The two industry areas most dissatisfied with the VET system were communication services and mining with mean scores of 4.6 and 5.6 respectively. Interestingly, the introduction of industry endorsed competency standards has been most recent in both the Mining and Communications industries, compared to other industries. Analysis of specific satisfaction items revealed the communication services industry to be, by far, the most dissatisfied with the items 'the training resulted in productivity gains for your organisation' and 'that the skills acquired were relevant to current needs of your organisation' with around two thirds of responses from communication services employers expressing dissatisfaction for each item.

Employers from the mining industry were the most likely to rate dissatisfaction with the 'the job readiness of the TAFE/private provider graduates' and 'that the skills acquired were relevant to future needs of your organisation' items with 76 per cent and 74 per cent expressing dissatisfaction respectively.

Table 6.2: 'That the Skills Acquired were Relevant to Future Needs of Your Organisation'

	% Satisfied	% Dissatisfied
Government administration and defence	92	3
Agriculture, forestry and fishing	89	6
Finance and insurance services	84	0
Cultural and recreational services	81	1
Personal and other services	80	2
Education	78	18
Health and community services	74	9
Construction	73	16
Manufacturing	72	15
Accommodation, cafes and restaurants	66	15
Transport and storage	65	13
Retail Trade	60	20
Property and business services	56	22
Electricity, gas, water supply	55	22
Wholesale Trade	43	14
Communication services	33	63
Mining	18	74
All industries	67	15

For other industry areas, percentages expressing satisfaction were generally substantially higher than percentages expressing dissatisfaction for each satisfaction item.

WHAT ARE EMPLOYER ATTITUDES TOWARDS THE VET SYSTEM?

Employers were asked in the survey to indicate their level of agreement or disagreement with a number of statements regarding attitude towards the VET system. The two most pertinent items relating to VET outcome performance measures were 'the VET system is providing graduates with skills appropriate to employers' needs' and 'the VET system does not take the needs of employers into account'.

Responses to the 'the VET system is providing graduates with skills appropriate to employers' needs' item indicated that, in general, for over three quarters of employers in most industries, the VET system is delivering the main skills required. However, similar to the findings for satisfaction, the mining and communication services industries stood out as being the only areas for which a greater percentage disagreed than agreed (see table 10.12). The three industries with the greatest percentage agreeing with the statement were:

- accommodation, cafes and restaurants (73 per cent)
- personal and other services (72 per cent)
- government administration and defence (68 per cent).

The three industries with the greatest percentage disagreeing were:

- mining (84 per cent)
- communication services (42 per cent)
- manufacturing (42 per cent).

With respect to the 'the VET system does not take the needs of employers into account' item, responses were quite mixed (see table 10.13). The three industries clearly most satisfied with regard to the VET system taking into account their needs were:

- government administration and defence (75 per cent disagreeing)
- accommodation, cafes and restaurants (63 per cent disagreeing)
- personal and other services (53 per cent disagreeing)

while the three industries with the greatest percentage agreeing with the statement were:

- mining (86 per cent)
- communication services (65 per cent)
- wholesale trade (53 per cent).

The consistently low dissatisfaction expressed by employers from the mining industry is in stark contrast to the finding from the graduate survey in which graduates employed in the mining industry expressed high levels of relevance of their TAFE course to their employment. However, where employers from the communication services industry were also among the most likely to express dissatisfaction with the VET system, the graduate survey revealed that graduates employed in this industry were among the most likely to rate their course as being irrelevant to their employment.

It was noted in chapter two that the mining industry has become increasingly capital intensive in recent years. A possible source of the dissatisfaction of the mining industry with VET graduates could be that the skills taught in VET courses do not reflect the rapidly changing skills needs of the workplace associated with the introduction of new technology. Similarly, the communication services industry has been the highest growth sector over the five year period to 1995-96 because of new technology. Again, it is possible that the source of dissatisfaction of this sector with VET graduates could be attributed to the lag associated with the introduction of new technology and the development of allied skills by VET providers.

HOW DO EMPLOYER VIEWS OF VET DIFFER BY ENTERPRISE SIZE?

The *National Employer Satisfaction Survey* recorded the enterprise size of employers surveyed. Size was classified as large (more than 100 employees), medium (21 to 100 employees), and small (less than 21 employees).

Satisfaction with the VET System

Employers' satisfaction scores for the VET system overall were:

- 7.4 for large enterprises
- 6.6 for medium enterprises
- 6.6 for small enterprises.

Employers from large enterprises were thus clearly the most satisfied overall.

Specific satisfaction items revealed that employers from medium and small enterprises were most dissatisfied with the job readiness of VET graduates and the relevance of skills acquired for the organisations' future needs. Where 86 per cent of employers from large enterprises expressed satisfaction with the 'that the skills acquired were relevant to future needs of your organisation' item, only 56 per cent and 68 per cent of employers from medium and small enterprises

respectively expressed satisfaction with this item. Similarly for the 'the job readiness of VET graduates' item, 84 per cent of employers from large enterprises expressed satisfaction compared with only 64 per cent and 70 per cent of employers from medium and small enterprises respectively.

Table 6.3: Selected Satisfaction Items by Enterprise Size

	% Satisfied	% Dissatisfied
'That the skills acquired were relevant to future needs of your organisation'		
Small	68	14
Medium	56	24
Large	86	5
'The Job Readiness of the TAFE/Private Provider Graduates'		
Small	70	15
Medium	64	20
Large	84	1

Attitude Towards the VET System

Among the many survey items investigating employers' attitudes towards the VET system, two in particular stood out with substantial differences in opinion between the different enterprise size groups. With regard to the 'the VET system does not take the needs of employers into account' item, only 12 per cent of employers from large enterprises agreed with this, compared with 42 per cent and 41 per cent of employers from medium and small enterprises respectively (see table 6.4).

Table 6.4: Selected Attitude Items by Enterprise Size

	% Agreed	% Disagreed
'The VET System Does Not Take the Needs of Employers into Account'		
Small	41	36
Medium	42	42
Large	12	29
"On-the-job' Skills are more Useful than Skills Obtained Through Formal Education'		
Small	70	11
Medium	66	12
Large	31	15

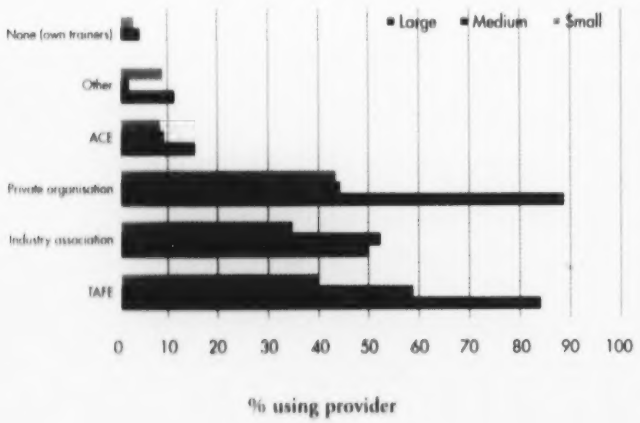
Employers from small and medium enterprises clearly value on-the-job skills more highly than skills obtained through formal education with 70 per cent and 66 per cent agreeing with the 'on-the-job skills are more useful than skills obtained through formal education' attitude item compared with only 31 per cent of employers from large enterprises.

VET Providers Used

Information gleaned on the providers used by employers suggests that employers from both large and small enterprises were slightly more likely to have used a provider other than TAFE (figure 6.5) while employers from medium sized enterprises were more likely to have used TAFE than a private organisation for their training.

While employers from small and medium sized enterprises used industry associations at roughly the same rate as their use of private organisations and TAFE, employers from large enterprises were far less likely to use industry associations relative to their use of private organisations and TAFE.

Figure 6.5: Training Providers used by Enterprise Size



WHAT IS A SUCCESSFUL OUTPUT?

One of the agreed output measures of the VET sector is the module load completion rate. This measure is used to examine the use of hours associated with modules leading to a satisfactory completion or output. For this report, successful outputs of the VET sector are measured at the module (subject) level rather than the course level. This is because many people who enrol in VET do so to pick up skills for their immediate needs through the modules offered rather than through full course activity. Module outcomes can be used as an indicator of successful output or competency achieved. This is discussed further below. Other output measures for VET not reported here include qualifications attained or awarded and rates of skills acquisition. These are currently under consideration for future performance reporting.

In *1995 Benchmarking VET*, three different aspects of module load completion rates were considered to account for the variety of VET provision. In this report this has been further refined to two measures of module load completion, a pass rate and a completion rate. Rates for 1996 are compared with the rates for 1995.

This chapter looks at the hours associated with clients in vocational programs and the 'results' of the module (subject) activity undertaken. In addition, this chapter looks at overall activity and enrolments in modules in VET and how the outcomes of this activity can be looked at in terms of competency achieved, not achieved and not yet achieved[1].

The scope of the data utilised in this chapter is restricted to adjusted NCVER national collection data.

WHAT MODULE ACTIVITY TOOK PLACE IN 1996?

Before looking at module outcomes, it is worth noting the level of activity undertaken at the module level in VET in vocational programs.

- In VET in 1996:
- 285.05 million module hours were associated with total training activity
- there were 8.47 million enrolments in modules
- an estimated 1.35 million students undertook these modules.

A full breakdown of module hours and enrolments for each State and Territory appears in the additional notes section for this chapter in Part C.

WHAT ARE OUTCOMES OF MODULE ACTIVITY?

Using enrolment information it is possible to determine an indicator of successful achievement of competency.

This is shown below.

In 1996:

- 61.5 per cent of module enrolments delivered a successful achievement of competency
- 11.2 per cent of module enrolments delivered did not achieve a competency
- 22.0 per cent of module enrolments were incomplete or to be continued.

[1] The information provided in this chapter is based on the enrolments and hours reported to by module outcomes under the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS). The number of module enrolments and curriculum hours associated with each module outcome for 1995 and 1996 VET activity are reported in Part C, additional notes for module load completion rates. This appendix also discusses the reporting differences due to different practices in State and Territories in reporting to module outcomes.

All activity reported in this chapter relates to module activity associated with vocational programs only. That is, any activity reported as recreational or personal enrichment has been excluded from the figures (see additional notes for further details).

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Table 7.1 gives a State break down by the module outcomes associated with competencies acquired. It should however be noted that there are some State to State variations in the reporting of module outcomes. (See Part C for a discussion on the mapping of module outcomes to skills acquisition.)

Table 7.1: Percentage Module Enrolments by Skills Acquired by State/Territory, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Competency Achieved*	65.9	57.9	56.0	72.3	58.0	61.3	51.9	64.5	61.5
Competency Not Achieved	14.8	13.1	5.4	5.7	5.6	11.6	10.0	17.1	11.2
Competency Not Yet Achieved	14.8	24.1	31.5	20.7	27.1	21.8	31.8	14.9	22.0
Not Known	4.5	4.9	7.1	1.3	9.2	5.3	6.3	3.5	5.2

*Includes students who were assessed as competent as well as those who successfully completed class hours.

In many cases a successful completion of a module will mean that the student has been tested (assessed) and has been deemed competent against the industry standards set for the module. However, in a range of areas, particularly literacy/language, preparatory studies and creative studies, different considerations can apply. In such courses a successful outcome cannot be measured in terms of examination pass rates.

Against this background, this report provides two sets of statistics on module load completions, namely, pass rates and completion rates.

WHAT WERE PASS RATES FOR 1996?

The pass rate in table 7.2 below is a pass rate for assessed students whose attendance was confirmed. This means that the students who passed the assessment are compared with all those who got a pass or a fail. Students who withdrew from the unit without having a failure recorded are excluded from the calculation. (See Part C for a full definition of the module load pass rate.)

Table 7.2: Pass Rates by State/Territory by Sex (Per Cent), 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Females	79.7	82.2	87.9	93.1	90.2	83.6	82.6	76.2	83.1
Males	78.3	78.3	89.1	90.6	90.3	80.5	83.9	73.9	81.5
All Persons	78.9	80.0	88.6	91.7	90.3	81.8	83.1	75.0	82.2

WHAT WERE COMPLETION RATES FOR 1996?

The completion rate here is a completion rate that compares

- students who completed a module regardless of whether or not they undertook a final assessment: with
- all students who commenced the unit and are not still studying that unit.

Table 7.3: Completion Rates by State/Territory by Sex (Per Cent), 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Females	81.6	88.3	84.1	98.6	89.8	87.8	81.4	77.8	85.4
Males	80.2	87.5	84.4	95.9	93.2	85.8	87.7	75.9	84.7
All Persons	81.0	87.9	84.3	97.1	91.6	86.6	84.3	76.8	85.1

(See Part C for a full definition of the module load completion rate.)

WHAT HAPPENED IN 1995 COMPARED WITH 1996?

The figures for 1995 have been revised since 1995 Benchmarking VET. A further discussion of these revisions appears in the additional notes for this chapter in chapter 10.

In 1996:

- pass rates—module load passes decreased nationally by 0.4
- completion rates—module load completions increased nationally by 3.6.

Table 7.4: Comparison of 1995 and 1996 Pass Rates by State/Territory (Per Cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
1995(Adjusted)	80.1	84.3	81.1	93.9	85.0	80.7	83.4	75.1	82.6
1996	78.9	80.0	88.6	91.7	90.3	81.8	83.1	75.0	82.2
Variation from 1995	-1.2	-4.3	7.5	-2.2	5.3	1.1	-0.3	-0.1	-0.4

Table 7.5: Comparison of 1995 and 1996 Completion Rates by State/Territory (Per Cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
1995(Adjusted)	79.5	80.5	86.1	90.1	83.2	77.9	72.6	73.7	81.5
1996	81.0	87.9	84.3	97.1	91.6	86.6	84.3	76.8	85.1
Variation from 1995	1.5	7.4	-1.8	7.0	8.4	8.7	11.7	3.1	3.6

OTHER SUCCESSFUL OUTPUTS—RECOGNITION FOR PRIOR LEARNING

Recognition for prior learning (RPL) is recognised as a successful output of the VET sector. Tables 7.6 and 7.7 report module activity for RPL as a percentage of enrolments and curriculum hours.

Table 7.6: Percentage of Enrolments and Hours Associated With RPL by State/Territory, 1996

	NSW	VIC	QLD*	SA	WA	TAS	NT	ACT	AUST
Enrolments	2.5	1.9	2.4	3.6	0.6	4.0	0.8	9.9	2.4
Hours	2.3	1.6	2.2	3.3	0.7	3.6	0.9	8.9	2.2

* Adjusted RPL for TAFE Queensland, see additional notes

Table 7.7: Percentage of Enrolments and Hours Associated With RPL by State/Territory, 1995

	NSW	VIC	QLD*	SA	WA	TAS	NT	ACT	AUST
Enrolments	2.3	1.6	2.0	1.8	0.5	2.2	0.5	7.7	1.9
Hours	2.1	1.4	1.8	1.7	0.5	2.2	0.5	7.5	1.8

* Adjusted RPL for TAFE Queensland, see additional notes

WHAT ARE THEY?

The unit costs outlined in this chapter represent government (ANTA Agreement) recurrent expenditure per annual curriculum hour, after adjustments have been made for the factors outlined below. More detail concerning the data used to derive unit costs can be found in Part C.

Data presented here on unit costs relate to the provision of government funded VET programs and associated administrative infrastructure, not to the whole of VET provision. The data therefore do not present a complete picture of training effort. Nevertheless, pending development of longer term measures by the Performance Review Committee (PRC), the measure of unit cost in 1996 remains government recurrent expenditure per annual curriculum hour. In addition, the PRC has asked for two additional measures to be included in unit costs, namely

- government recurrent expenditure per module completion in government funded programs, and
- government recurrent expenditure per module completion in all programs.

These data are also provided.

This chapter will analyse the following measures:

- government recurrent expenditure per public annual hours curriculum (AHC)
- government recurrent expenditure per public module load completion (MLC), and
- government recurrent expenditure per total module load completion (MLC).

QUALITY AND COMPARABILITY OF DATA

The question of data comparability between jurisdictions is at the heart of the effectiveness of benchmarking data at the national level. This year ANTA chief executives asked the National Advisory Committee on Vocational Education and Training Statistics (NACVETS), through the independent adjuster, to review the quality and comparability of data used to derive unit costs for this report.

A comprehensive review was undertaken with all States and Territories and the Commonwealth, supported by additional commissioned research.

In 1997, the review found that only minor variations remain. The level of adjustment required is in the order of less than five per cent in reporting of both activity and finance data. This represents a considerable advance within the VET sector in the quality and comparability of data across jurisdictions, particularly data related to the calculation of unit costs within the current parameters of that calculation. That is, the quality and comparability of source data underlying the calculation does not account for differences between jurisdictions of the order currently seen.

While the improvement to data comparability constitutes an advance for the sector, as subsequently discussed there are many valid reasons why costs differ between jurisdictions. These reasons are discussed more fully in the remainder of this chapter.

WHAT INFLUENCES UNIT COSTS?

Last year this report noted that the key drivers of cost differences which have the greatest impact on unit cost differences included

- class sizes
- teaching salaries
- teaching hours per full time equivalent staff member
- differences in the length of courses of similar types.

In looking at the question of quality and comparability of data, the review undertaken by the independent adjuster found that there were a number of wider issues which need to be taken into account in the calculation of unit costs. These encompass both exogenous factors relating to the particularities of jurisdictions in terms of geographic dispersal, industry mix and characteristics of the population, as well as to the policy and strategic responses of governments to these factors. Further work at the level of benchmarking like providers, both within and between States and Territories, would assist in unpacking these differences and in deriving more robust unit costs for comparative purposes.

Issues such as geographic dispersion, industry mix and population characteristics are generally understood to give rise to differences in delivery arrangements and consequently, costs, however, there has been less discussion in VET on policy differences. This goes to such issues as encouragement of commercial activity within public providers where government funds may subsidise commercial activity or where commercial activity may, in part, subsidise government funded activity. The viability of markets for VET in particular geographic regions becomes an issue in this context. This review has not looked to providing any advice on these issues but rather notes them as issues worthy of further consideration.

In addition, the review touched on the question of the most appropriate database for deriving unit costs. The database from which unit costs are derived currently is Maintenance of Effort data. In the course of this review, there has been much discussion on the difficulties of using this database for the purposes of calculating unit costs, against an understanding that at this stage, no better database is available.

Notwithstanding the findings of the review that the financial data, as currently derived, are both comparable and of reasonable quality, a further issue raised related to whether the current formulation of government recurrent expenditure per AHC, on its own, is an adequate measure of efficiency. There may be merit in looking at further breakdown of the measure into such elements as delivery cost. Consideration should also be given to the use of the national financial collection as the database for this measure.

Last year's report also looked at what the Commonwealth Grants Commission said about inter-state differences in VET. The Commonwealth Grants Commission has the responsibility to advise the Commonwealth Government on cost differentials across the States/Territories. The Commission has a mandate to analyse why some States/Territories spend less, and others more, than the Commission's assessment of what they need to spend to provide a standard level of service at an average level of efficiency. An outline of Commonwealth Grants Commission's service delivery costs appears in the additional notes section for this chapter in Part C.

WHAT DATA ADJUSTMENTS HAVE BEEN MADE?

Invalid Enrolments

Enrolments in VET are confirmed when the student attends class or submits at least one piece of work. For the purpose of unit cost calculations here, the proportion of activity that is confirmed as invalid through the activity audit reports has been used to discount the overall reported activity. It should be noted that the reported unit costs figures should be treated as *minimum* estimates. There is also a significant proportion of overall activity that is still to be confirmed and is likely to be 'confirmed as invalid.' A comparison between the minimum and maximum estimates is provided in Part C. (For a further explanation of invalid enrolments see the data adjustments notes for this chapter in Part C.)

Effects of Course Mix on Costs

In deriving unit costs it is important to make adjustments to take into account different training delivery profiles across jurisdictions. The course-mix weights outlined below have been derived from information provided by States and Territories. A weight of greater than one indicates that the State or Territory is offering relatively more expensive program delivery compared to the overall national profile.

The weightings are used to load courses which are more or less expensive. These weightings are used in reporting on 1996 data below. The index of course relativities is provided in table 8.1.

Table 8.1: Cost Relativities Based on Course-Mix Weights

NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
0.98	1.01	1.00	1.02	0.99	1.04	1.01	1.00	1.00

Source: Derived by ANTA using 1996 estimated activity (from the 1997 State Training Profiles) and unit cost weightings provided by the Unit Cost Working Party.

WHAT WERE UNIT COSTS IN 1996 AND HOW DO THEY COMPARE WITH 1995?

National unit costs appear to have increased marginally between 1995 and 1996, after adjustments have been made for course mix and confirmed invalid module enrolments. However, caution should be taken in the interpretation of this data. Changes in the methodology applied in the calculation of confirmed invalid enrolments have resulted in differing adjustments being applied between the two years. Additionally, the 1996 financial data have been adjusted to provide comparability between States and Territories whereas the 1995 data was not (see Part C for details).

Table 8.2: Comparison of Unit Costs Between 1995 and 1996 (in 1996 Prices)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
1996	11.4	9.5	10.7	13.8	11.3	14.3	21.8	15.2	11.1
1995 (in 1996 prices[1])	10.9	9.0	11.0	13.2	12.8	15.5	19.5	15.7	11.0

Source: 1996 data is based on interim audit reports. Unit costs have been adjusted for course mix and confirmed invalid module enrolments see Part C

Differences in unit costs between jurisdictions arise because of the factors noted earlier in relation to cost factors, geographic dispersion, industry mix and population characteristics as well as the relative effectiveness of the system.

WHAT ARE THE UNIT COSTS OF SUCCESSFUL MODULE COMPLETIONS?

Table 8.3 provides figures on the costs of delivery to produce a successful output in government funded programs. These figures are based on the expenditure and the total amount of delivery in government funded programs which results in a successful outcome or module load completion (MLC). For an explanation of the calculation of these figures see Part C.

[1] Adjusted using the non-farm Gross Domestic Product (GDP) Implicit Price Deflator

Table 8.3: Government Recurrent Expenditure Per Hour of Successful Module Completion in Government-funded Programs, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
$ per hour of government funded module load completion	15.1	13.3	13.5	16.5	17.3	20.8	44.2	20.2	15.1

Source: Derived from interim audit reports. Data has been adjusted for course mix and confirmed invalid module enrolments.

As well as how much it costs to produce a successful output in government funded programs, it is useful to look at the ratio of expenditure in government funded activity to the total amount of training delivered that resulted in a successful outcome. These figures appear in table 8.4. An explanation of the calculation of these figures appears in Part C.

Table 8.4: Government Recurrent Expenditure Per Hour of Successful Module Completion in All Programs, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
$ per all module load completions	14.4	11.2	11.0	14.6	14.5	16.0	26.5	17.3	13.2

Source: Derived from interim audited financial Maintenance of Effort report and module load completions from the AVETMISS collection. Data has been adjusted for course mix and confirmed invalid module enrolments.

It should be noted that the measures outlined above mask a wide divergence in the average hours taken to complete a module between jurisdictions. Through work currently underway concerning the development of appropriate output measures for the VET system, it is anticipated that it will be possible to include a cost per successfully completed module (and other output measures) in future key performance measure reports.

HOW DO UNIT COSTS COMPARE WITH OTHER EDUCATIONAL SECTORS?

Table 8.5: Estimates of Cost of Full-time Equivalent Students in the Schools, VET and University Sectors

	$ per equivalent full-time student
Secondary School (all grades)	$6,110
VET	$8,000
University	$11,800

Source: MCEETYA 1995-96 Summary Financial Statistics
DEETYA Higher Education Funding Report for the 1997-99 Triennium.

Note: The unit cost relativities between the education and training sectors have altered from the data published in 1995 to provide a better comparison of recurrent costs once university research costs have been excluded.

This chapter examines the performance of the vocational education and training (VET) sector by comparing the number of annual curriculum hours delivered by each of the State/Territory training systems against those hours they planned to deliver in respect of 1996. This measure has most value within each State/Territory for planning purposes. When further disaggregated by training areas and occupational levels, differences in patterns of delivery between States/Territories also become apparent.

Information on 1996 planned activity (Annual Hours Curriculum—AHC) is taken from the revised estimates in the 1997 State/Territory Training Profiles (where it is reported by training area and by occupational level). Information on actual activity (total activity only) is derived from the 1996 NCVER Audit Verification Reports. Consequently, this chapter shows:

- the distribution of planned 1996 activity by occupational area across jurisdictions
- the distribution of planned 1996 activity by training area across jurisdictions, and
- a comparison between total planned and actual activity across jurisdictions.

This chapter also includes a measure of relative effort for each State/Territory by providing a measure of the size of the VET activity occurring in each jurisdiction relative to their population share.

WHAT DID THE VET SECTOR PLAN TO DELIVER IN 1996?

Table 9.1 below outlines how planned activity for 1996 was spread across occupational levels within States/Territories and table 9.2 demonstrates the spread across training areas.

Table 9.1: 1996 Planned Activity (AHC) by Occupation Level by State/Territory (Per Cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Module Only Activity	0.0	0.0	0.0	8.4	0.0	4.4	0.4	0.0	0.6
General/Unspecified	26.0	16.2	17.5	7.1	11.1	2.6	20.5	12.3	18.8
Operative/Clerical	20.4	22.3	41.6	27.0	25.3	28.2	32.8	30.9	25.6
Trades/Skilled	21.7	18.0	16.8	28.1	27.6	28.8	15.2	24.4	20.9
Prof/Para-professional	31.9	43.4	24.2	29.5	36.0	35.9	31.0	32.3	34.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Revised 1996 AHC from 1997 State/Territory Training Profiles

The training areas referred to in table 9.2 fall into three categories A, B and C. Category A consists of occupational training which is industry specific including activity intended to train people for a specific occupation or set of occupations which are primarily associated with specific industries or groups of industries.

Category B consists of occupational training which is non-industry specific including activity which provides vocational education and training for occupations found across many industries. Category C is general education and training and includes activity which has no specific occupational content but which equips students with general workforce skills such as literacy, numeracy and social skills. Adult Year 11 and 12 programs also belong to this category.

Table 9.2: 1996 Planned Activity (AHC) by Training Area by State/Territory (Per Cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Category A									
Arts, Entertainment, Sports & Rec	3.7	5.7	2.8	6.0	9.1	4.5	4.9	4.8	4.8
Automotive	3.2	3.8	2.5	6.3	3.2	4.1	2.2	3.3	3.4
Building and Construction	7.7	6.5	12.2	4.5	7.2	6.5	5.7	10.0	7.8
Community Services, Health & Ed	6.8	10.4	8.1	9.1	11.5	10.5	10.5	11.9	8.7
Finance, Banking & Insurance	2.1	1.2	0.7	0.9	1.1	1.3	2.7	0.4	1.4
Food Processing	0.5	1.5	1.3	1.6	0.7	2.1	0.2	0.6	1.0
TCF and Furnishings	2.5	2.1	1.7	3.7	2.8	3.8	1.6	2.3	2.4
Communications	0.8	0.8	0.5	1.0	0.9	0.7	0.9	1.7	0.8
Engineering and Mining	5.5	7.9	6.4	6.5	7.6	10.2	4.3	2.4	6.5
Primary Industry	4.2	4.8	5.9	7.2	4.8	5.6	11.0	3.6	5.0
Process Manufacturing	0.2	0.2	0.0	0.2	0.0	0.1	0.0	0.0	0.2
Sales and Personal Service	2.2	2.6	2.9	3.9	3.8	5.0	2.6	2.4	2.7
Tourism and Hospitality	5.8	7.0	9.2	7.3	6.2	8.3	7.4	12.3	7.0
Transport and Storage	0.6	0.8	0.6	0.7	1.0	0.5	1.5	0.2	0.7
Utilities	4.7	6.3	2.9	5.2	5.2	5.1	7.3	6.5	5.0
Category B									
Business and Clerical	17.5	17.4	20.2	22.2	13.4	17.8	14.3	12.9	17.7
Computing	4.7	5.1	5.4	4.1	5.7	4.2	5.0	6.9	5.0
Science, Technical and Other	3.0	2.5	3.4	0.7	2.8	4.2	2.9	6.5	2.8
Category C									
General Education and Training	24.4	13.3	13.1	9.2	10.3	5.3	15.0	9.5	16.7
Un-allocated	0.0	0.0	0.0	0.0	2.6	0.0	0.0	1.9	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Revised 1996 AHC from 1997 State/Territory Training Profiles

HOW DID 1996 PLANNED GOVERNMENT FUNDED ACTIVITY COMPARE WITH ACTUAL DELIVERY?

Table 9.3 compares the total planned and actual hours across States/Territories for 1996.

Table 9.3: 1996 Planned and Actual Annual Hours Curriculum (,000) and Variation by State/Territory

	NSW*	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Planned	86,641	65,207	38,178	14,914	20,649	3,916	2,799	4,042	236,346
Actual	86,407	64,800	36,273	15,051	21,457	4,116	2,410	4,008	234,522
% Variation	0	-1	-5	1	4	5	-14	-1	0

Source: Revised 1996 AHC from 1997 State/Territory Training Profiles and Actual 1996 data from preliminary 1996 NCVER activity audit reports
*Estimate adjusted to take account of rebasing that has occurred as data systems have improved. These figures are preliminary, based on data from partially completed rebasing exercises.

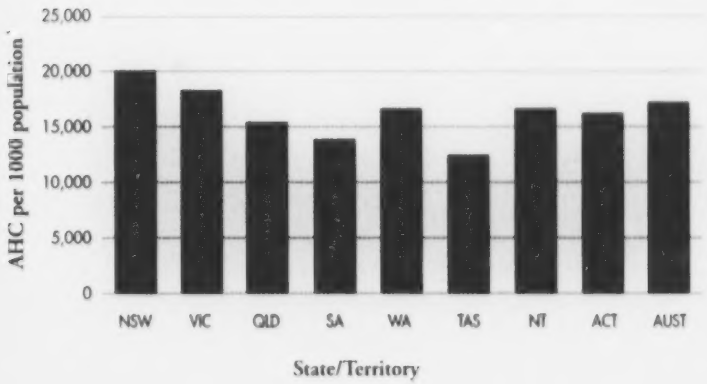
WHAT IS THE RELATIVE EFFORT IN VET?

Relative effort monitors the size of the VET system in relation to the population of each State and Territory. The measure compares AHC within each State/Territory with the corresponding population share for the 15 to 64 year old age cohort.

The information shown in figure 9.1 refers to government funded activity within the ANTA scope and boundary only. It excludes AHC associated with recognised prior learning, credit transfer and invalid module enrolments.

Figure 9.1 indicates that approximately 18,000 government-funded AHC were delivered per 1000 population (aged 15 to 64 years) in 1996. The highest relative effort was reported in New South Wales and Victoria, with Tasmania and South Australia reporting the lowest level of effort.

Figure 9.1: Annual Hours Curriculum (AHC) per 1000 Population (Aged 15 to 64 Years) by State/Territory, 1996



Source: AHC derived from 1996 NCVER Audit Verification Reports. Population data (as at June 1996) derived from 1996 ABS Census Data.

PART C

APPENDIX: ADDITIONAL NOTES

This chapter deals with those technical aspects of the data, its collection and adjustment processes undertaken in the course of compiling this report while also providing further relevant information considered too detailed for inclusion in the main body of the report.

Unless where otherwise specified in the report, the data analysed in this report relates to vocational program activity only (that is, streams 2400 to 4500 or module only enrolments) and excludes recreation and leisure program activity (stream 1000).

1 INTRODUCTION

Additional Notes

States and Territories were consulted using agreed protocols in the preparation of the report. The working group of three State officials was again convened comprising:

- Mr Tom Dumbrell, NSW Department of Training and Education Coordination
- Dr Susan King, WA Department of Training, and
- Dr Richard Watkins, Tasmanian Department of Vocational Education and Training.

The working group was supported by Mr Don Brewster, together with NCVER staff including Mr Chris Robinson, Managing Director, and Ms Jessie Borthwick General Manager.

The main vehicle for State and Territory consultations was the State/Territory reference group. The participants in the State/Territory reference group were:

- Ms Marie Aloise, NT Employment and Training Authority
- Ms Robyn Bergin, DEETYA
- Ms Judy Bertram, Queensland Department of Training and Industrial Relations
- Dr Kaye Bowman, Australian National Training Authority
- Mr Darryl Carter, SA Department for Employment, Training and Further Education
- Ms Annette Dallas, Tasmanian Department of Vocational Education and Training
- Dr Susan King, WA Department of Training
- Dr Robert Mawer, TAFE NSW
- Mr George McLean, Victorian Office of Training and Further Education
- Dr Elizabeth Owen, Canberra Institute of Technology
- Dr Ian Willis, ACT Vocational Education & Training Authority

and two observers, namely,

- Mr Ben Furmage, Industry Commission
- Mr Walter Ivessa, Queensland Treasury Department.

2 THE ECONOMIC AND LABOUR MARKET CONTEXT FOR VET

Data Source

The principle sources of data used in this chapter were ABS economic and labour market data.

Additional Notes

Table 10.1 provides the gross state product at average 1989-90 prices for the five year period 1990-91 to 1994-95, and the one year period 1993-94 to 1994-95, by State/Territory to enable the comparison of economic growth rates of the States and Territories.

Table 10.1: Gross State Product at Average 1989-90 Prices, $m

	Average annual rate of growth	
	Five year period 1990-91 to 1994-95	One year period 1993-94 to 1994-95
NSW	2.3	3.9
Vic	2.0	4.6
Qld	4.7	5.4
SA	0.9	0.0
WA	4.1	3.6
Tas	0.9	0.4
NT	2.6	10.0
ACT	3.3	1.5
Australia	2.7	4.2

Source: ABS Cat No. 5220.0

Table 10.2 provides the proportion of gross state product at factor cost for 1994-95 by industry and State/Territory to illustrate the amounts various industries contribute to each State or Territoryís gross state product.

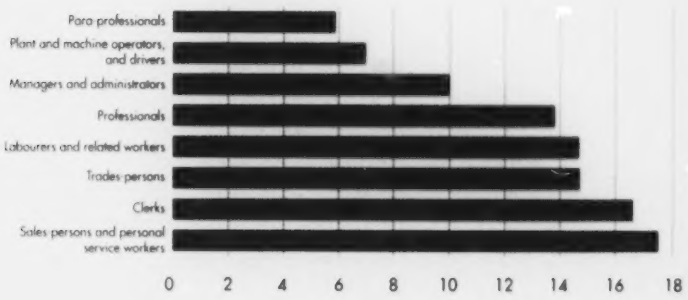
Table 10.2: Proportion of Gross State Product at Factor Cost - 1994-95

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Agriculture, forestry & fishing	2.05	2.65	4.56	4.44	4.88	6.46	3.71	0.12	3.16
Mining	2.01	3.14	4.65	1.92	15.29	2.11	16.52	0.07	4.25
Manufacturing	15.31	18.26	12.41	17.52	10.35	14.79	5.43	2.51	14.83
Electricity, gas & water supply	3.19	3.58	3.39	3.01	2.77	5.57	2.00	1.73	3.27
Construction	6.93	5.83	7.55	6.16	8.04	6.78	9.07	7.20	6.83
Wholesale Trade	6.44	6.36	5.67	4.92	5.75	4.56	3.58	2.38	5.94
Retail Trade	7.87	7.41	9.36	8.53	7.57	10.08	8.89	6.91	8.05
Accom., cafes & restaurants	2.46	1.84	3.23	1.87	1.71	2.72	3.40	2.02	2.31
Transport & storage	5.75	4.96	6.82	6.01	5.02	4.69	5.51	3.17	5.58
Communication services	3.07	3.36	2.92	2.54	2.73	2.31	2.69	2.62	3.01
Finance & insurance	4.78	4.04	2.91	3.68	2.48	2.14	2.42	3.05	3.84
Property & business services	10.08	9.34	6.60	7.78	7.87	4.94	6.43	10.59	8.78
Government admin. & defence	3.19	3.37	4.10	2.88	2.79	4.55	7.36	26.79	3.92
Education	4.71	5.30	5.03	5.36	4.19	5.13	5.11	5.89	4.94
Health & community services	5.68	6.52	5.76	8.31	5.86	7.29	5.65	4.84	6.14
Cultural & recreational services	1.85	1.78	1.44	1.66	1.30	1.50	2.69	2.78	1.72
Personal & other services	1.90	1.76	2.02	2.53	2.14	1.91	2.42	2.61	1.98
Ownership of dwellings*	11.02	8.79	9.46	8.87	7.35	9.52	5.16	9.16	9.50
General Government*	1.74	1.70	2.11	2.01	1.91	2.95	1.93	5.55	1.94

Source: ABS Cat. No. 5220.0
*Gross operating surplus

Figure 10.1 illustrates employment share by ASCO groupings for 1996 and complements figure 2.3 which provided employment share by industry groupings for 1996.

Figure 10.1: Employment share by ASCO groupings, Australia, 1996



Source: ABS 1996, Transition from Education to Work Australia, May 1996, Cat. No. 6227.0

3 THE VOCATIONAL EDUCATION AND TRAINING MARKET

Data Source

Apart from the Allen Consulting Group data at the beginning of this chapter, the analysis in this chapter is based on NCVER's 1996 national VET collection, including Australian training statistics on apprenticeships and traineeships.

Additional Notes

Allen Consulting Group Estimates Derivations

The distributions of VET expenditure used by the Allen Consulting Group were derived from 1992 estimates of expenditure per training provider type. Estimates of the size of major training provider groups were based on the lower limit estimated figures for 1992. The methodology employed for the derivation of these estimates was as follows:

- TAFE: a direct estimate of size is possible using the income and expenditure data contained in ACVETS, *Collection of National Financial Data on Vocational Education and Training*, a financial statistics collection conducted by Coopers and Lybrand for ACVETS in 1994.
- Enterprises: refers to enterprise internal training spending and excludes employee salary cost while undertaking training. A direct estimate of size is available from the ABS publication, *Employer Training Expenditure, May 1994*.
- The size of all other segments is estimated indirectly using ABS estimates of employment by sector as proxy for estimates for the income of each sector.
- The "lower level" estimate is made by taking the employment in each sector, multiplying it by an average employment cost and adding an allowance for overhead costs.

Figure 3.7 Recoding of Qualification Level Codes

Figure 3.7 Codes	AVETMISS Qualification Codes
1 Diplomas	10 Diploma 20 Associate Diploma 86 AQF - Diploma 87 AQF - Advanced Diploma
2 AQF Certificate IV & Equivalent	31 Advanced Certificate 32 Advanced Certificate - Other 85 AQF - Certificate IV
3 AQF Certificate III & Equivalent	41 Certificate - Trade 42 Certificate - Not Elsewhere Classified 84 AQF - Certificate III
4 AQF Senior Secondary & Certificates I & I	81 AQF - Senior Secondary 82 AQF - Certificate I 83 AQF - Certificate II
5 Other Certificates & Statements of Attainment	60 Statement of Attainment 70 Certificate of Competency 80 Certificate of Proficiency
6 Endorsements and Others	50 Endorsements to Certificates 90 Other
7 AQF Bachelors Degree	88 AQF Bachelors Degree
8 Non Award Courses	99 Non Applicable (ie. Not an award course)

4 PARTICIPATION IN VET

Data Source

Apart from ABS survey, census and population data used in this chapter, and Finn target data supplied by ANTA, all other data used are NCVER's 1996 national VET collection data. NCVER data used in this chapter relate only to VET students that

- are enrolled in at least one vocational program (that is, they have at least one course enrolment in a stream 2100-4500 course or module only enrolments), and
- were participating in the VET sector from a 'tuition' point of view (that is, have at least one module outcome which is not Recognition for Prior Learning (RPL) or Credit Transfer (CT)).

Indigenous and non-English speaking background person population figures are from 1996 ABS census data while the latest ABS disability population figures available are for 1993.

Data Adjustments

Participation data supplied from the 1996 national VET collection has been adjusted for student enrolment no attendance (SENA), on information supplied by the maintenance-of-effort activity measures auditors at the National Centre for Vocational Education Research.

Based on a stratified sample of module enrolments in each State and Territory (the same sample as used for determining invalid module enrolments) the NCVER auditors determined an estimate of the proportion of non-confirmed students. For the purposes of this report, participation rates have been adjusted based on the 'confirmed invalid' student rate. Hence the rates given should be treated as the *maximum* possible participation rates.

Table 10.3: 1996 Adjustment Factors for Student Enrolment No Attendance (SENA) (Per cent)

	NSW	VIC*	QLD*	SA*	WA*	TAS*	NT	ACT
Confirmed SENA	0.21	2.60	1.39	4.58	6.55	2.30	1.37	2.16
Confirmed + Possible SENA	2.14	2.60	3.84	6.80	12.79	4.89	3.98	4.73

Source: 1996 NCVER Audit Verification Reports.

* The confirmed SENA rates for these jurisdictions were not reported in the activity audit. For the purpose of this report, confirmed SENA rates were estimated by adjusting the confirmed plus possible SENA rate by the ratio between the two adjustment rates reported for invalid module enrolments.

Additional Notes

Table 10.4: RPL and Credit Transfer Students Not in Tuition, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Students excluding RPL/CT	480,850	385,076	192,153	93,992	102,386	23,707	20,793	18,069	1,317,025
RPL/Credit Transfer Students	5,199	919	108	892	2,874	116	129	118	10,357
Students including RPL/CT	486,049	385,995	192,261	94,884	105,260	23,823	20,922	18,187	1,327,382

Table 10.5: Participation Rates—Males, 1996 (Per Cent)

Age	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
15	6.9	4.7	11.0	3.4	6.0	1.3	11.7	1.2	6.6
16	21.3	12.9	28.6	9.2	15.1	18.6	18.3	5.3	18.7
17	25.0	18.9	30.4	17.4	27.2	25.0	22.3	11.2	23.9
18	33.9	33.9	28.0	26.8	34.1	29.3	30.9	28.1	32.0
19	32.2	35.7	25.1	25.9	29.7	27.2	28.5	31.9	30.8
20	27.4	32.2	20.5	22.7	23.2	21.5	26.4	27.4	26.3
21	21.9	26.4	16.4	17.8	16.7	17.9	22.7	19.2	21.0
22	17.3	21.2	13.0	15.0	12.7	14.1	20.6	13.2	16.7
23	14.6	18.1	10.9	13.6	11.8	11.8	16.6	11.8	14.3
24	13.2	16.5	9.7	12.3	10.9	11.0	16.8	8.8	12.9
25-29	11.3	15.4	8.8	11.2	9.6	9.8	15.9	8.8	11.7
30-34	10.1	14.0	8.0	10.0	8.4	8.9	13.1	7.0	10.4
35-39	8.6	12.9	7.2	9.0	6.9	7.4	11.9	5.7	9.2
40-44	7.1	11.0	6.2	7.6	5.6	5.6	9.3	5.1	7.7
45-54	4.9	13.2	4.5	5.6	3.9	3.7	6.9	2.9	5.5
55-64	2.6	3.9	2.1	2.6	1.8	1.4	3.2	1.7	2.7
65+	0.9	1.0	0.4	0.7	1.6	0.1	1.3	0.3	0.8
15-64	10.2	14.1	9.0	9.3	8.7	8.4	12.7	8.0	10.4

Source: Derived using NCVER data and ABS Estimated Resident Population by Sex/Age, June 1996 (Cat. No. 3101.0)

Table 10.6: Participation Rates—Females, 1996 (Per Cent)

Age	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
15	6.8	3.3	11.2	3.1	3.8	0.6	6.7	2.6	5.9
16	20.0	7.7	25.7	6.1	9.0	11.2	16.0	3.8	15.3
17	21.8	9.8	24.5	13.8	19.2	16.2	22.5	8.5	18.1
18	28.1	23.3	20.8	20.7	24.8	20.3	27.4	24.8	24.4
19	24.3	22.9	16.6	18.7	19.9	16.3	19.7	24.2	21.3
20	20.1	19.2	13.2	17.2	15.6	14.1	19.8	17.1	17.7
21	17.4	16.9	11.1	15.0	13.1	12.3	17.2	13.1	15.2
22	15.8	15.2	10.0	14.0	11.5	11.3	15.2	11.9	13.8
23	14.3	14.3	9.2	13.6	10.7	9.6	13.4	9.2	12.7
24	13.7	13.0	8.1	12.3	9.6	7.8	13.4	8.4	11.7
25-29	11.9	11.4	7.1	10.8	8.5	7.0	12.9	7.9	10.3
30-34	10.9	10.5	6.4	9.9	7.9	6.6	12.0	6.3	9.4
35-39	10.8	11.4	6.5	10.0	7.7	7.1	10.8	6.6	9.6
40-44	9.8	10.7	6.0	9.5	6.9	6.9	9.9	5.6	8.9
45-54	7.2	7.9	4.3	7.0	4.7	3.9	7.9	3.8	6.4
55-64	3.3	3.8	1.6	3.0	1.9	1.1	3.5	1.5	2.9
65+	0.7	1.2	0.3	0.7	1.1	0.1	1.6	0.3	0.8
15-64	10.7	10.3	7.4	9.2	7.8	6.6	11.5	7.1	9.4

Source: Derived using NCVER data and ABS Estimated Resident Population by Sex/Age, June 1996 (Cat. No. 3101.0)

Table 10.7: Participation Rates—All Persons, 1996 (Per Cent)

Age	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
15	6.9	4.0	11.1	3.3	4.9	0.9	9.3	1.9	6.3
16	21.0	10.4	27.2	7.7	12.2	15.0	17.2	4.6	17.2
17	23.8	14.5	27.5	15.7	23.3	20.8	22.4	9.9	21.2
18	32.1	28.8	24.5	23.8	29.6	24.9	29.3	26.4	28.6
19	28.9	29.5	21.0	22.4	24.8	21.9	24.3	28.1	26.4
20	24.1	25.8	17.0	20.0	19.5	17.9	23.2	22.4	22.2
21	19.8	21.7	13.8	16.4	14.9	15.2	20.1	16.3	18.2
22	16.7	18.2	11.6	14.5	12.1	12.8	17.9	12.6	15.3
23	14.6	16.2	10.1	13.6	11.3	10.7	15.0	10.5	13.5
24	13.5	14.8	8.9	12.3	10.2	9.4	15.1	8.6	12.4
25-29	11.7	13.4	8.0	11.0	9.1	8.4	14.3	8.4	11.0
30-34	10.5	12.2	7.2	9.9	8.1	7.7	12.5	6.7	9.9
35-39	9.7	12.1	6.9	9.5	7.3	7.2	11.3	6.2	9.4
40-44	8.5	10.8	6.1	8.5	6.3	6.2	9.6	5.4	8.3
45-54	6.0	9.9	4.4	6.3	4.3	3.8	7.3	3.3	6.0
55-64	3.0	3.8	1.8	2.8	1.9	1.2	3.3	1.6	2.8
65+	0.8	1.1	0.3	0.7	1.3	0.1	1.4	0.3	0.8
15-64	10.5	12.1	8.2	9.2	8.2	7.5	12.1	7.6	9.9

Source: Derived using NCVER data and ABS Estimated Resident Population by Age, June 1996 (Cat. No. 3101.0)

Table 10.8 shows the difference between 1996 and 1995 'students with client group not reported' percentages thereby indicating whether or not there has been an increase or decrease in the percentage of people willing to identify with the various target groups.

Table 10.8: Differences in 1996 'Students with Client Group Not Reported' percentages from 1995 for 15 to 64 Year Old Age Cohorts

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Aboriginal and Torres Strait Islanders	-5.0	6.9	-0.4	-9.1	-7.4	-1.7	13.5	0.8	-1.2
NESB (Language Spoken at Home)	-6.4	-9.8	-30.3	-9.9	-1.1	-4.2	40.9	0.6	-10.3
NESB (Country of Birth)	-4.8	-8.1	-34.9	-8.5	-0.4	-2.7	7.7	-0.5	-10.1
People With a Disability	-1.5	14.3	-1.8	-2.9	32.2	3.7	35.8	5.6	6.3

The percentage of persons not identifying as an Aboriginal or Torres Strait Islander or otherwise has changed little from 1995 whereas the percentages of unidentified persons with respect to the non-English speaking background person identifiers have both decreased by around 10 percentage points. Non-identification with respect to the disability identifier has increased from 1995 by 6 percentage points.

Finn Target Monitoring Methodology

The methodology for monitoring the Finn targets was adopted by MCEETYA in May 1995 and comprises:

Target one: by 2001, 95 per cent of 19 year olds:

- are participating in Year 12, or
- have completed Year 12, or
- have completed Years 10 or 11 and are participating in some formally recognised education or training, or
- have completed Year 10 or 11 and have completed some formally recognised education and training.

Target two: by 2001, 60 per cent of 22 year olds:

- are participating in education or training programs which lead to level III awards, or
- have attained level III qualifications, or
- have attained above level III qualifications, or
- are participating in, or have completed higher education studies such as a degree or diploma.

5 TAFE GRADUATE DESTINATIONS

Data Source

The principle source of data for this chapter was the *1995 VET Graduate Destination Survey* which was restricted to persons completing TAFE studies in 1994. Other data sources include ABS information and results from the *Graduate Destination Survey 1995* conducted by the Graduate Careers Council of Australia Ltd which investigates higher education graduate destinations.

Additional Notes

Table 10.9: Key findings from the *Graduate Outcomes (TAFE) Australia* survey, 1995

OUTCOMES OF TAFE TRAINING FOR GRADUATES

- **Labour market status**
  - 72.5 per cent of TAFE graduates were in paid work
  - 51.5 per cent of graduates were in full-time work and 20.9 per cent were in their first full-time job
- **Field of study outcomes**
  - most employed graduates came from business, administration courses (30.5 per cent) and engineering, surveying courses (14.9 per cent)
- **Industries graduates were employed in**
  - the manufacturing (16.4 per cent) and construction (10.6 per cent) industries were the largest employers of graduates
- **Occupation outcomes**
  - 32.6 per cent of full-time employed graduates were trades persons the largest occupation group
  - the largest occupation group for part-time workers was the sales person grouping
  - TAFE graduates tend go into private sector industries (75.3 per cent), are employed with large employers with >100 employees (51.0 per cent), and are employed as permanent (74.7 per cent) or casual employees (25.3 per cent).

Table 10.10: Field of Study by Employment Status (Full-time or Unemployed), May 1995

	% In full-time work	% In part-time work	% Looking for work	% Not looking for work
Architecture, building	76.6	7.2	9.2	3.5
Engineering, surveying	76.5	5.9	9.2	6.0
Land, marine resources	58.2	14.8	15.0	8.5
Business, administration	55.0	17.6	14.4	9.8
All fields of study	51.5	17.9	14.9	12.3
Services, hospitality	42.7	25.7	15.0	12.5
Health, community services	41.7	30.1	13.6	10.2
Veterinary science, animal care	40.7	20.7	19.6	16.6
Arts, humanities, education	28.0	29.1	15.9	22.9
TAFE multi-field education	21.3	12.9	30.3	32.4

Source: Derived from 1995 Graduate Outcomes (TAFE) Australia

6 EMPLOYER SATISFACTION WITH VET

Data Source

The data source for this chapter was the 1995 National Employer Satisfaction Survey which surveyed 2000 employers nationally on their attitudes towards and satisfaction with the VET system.

The survey covered not only employers' views on VET providers in receipt of public funds, but encompassed all providers of VET training.

Additional Notes

Specifically in relation to employer satisfaction items, graduates in the survey were divided into four categories, namely, those who completed their VET qualification at TAFE before being employed, those who completed their TAFE qualification after recruitment, and the same two categories for graduates from private providers (82 per cent of graduates were from TAFE). However, due to sample size and the dis-aggregation of data by ANZSIC industry code (and employer size), all these response types were pooled together for the purposes of analysis by industry and employer size. Thus it ought to be borne in mind that employers with more than one classification of graduate will be represented more than once. This data nevertheless still provides a valuable insight into employers' satisfaction with the whole VET system (tables 10.11, 10.12, 10.13).

Table 10.11: Key findings from National Employer Satisfaction Survey, 1995

OUTCOMES OF VET FOR INDUSTRY

- **Industry satisfaction with VET training**
  - The mining and communication services were the industries most dissatisfied while the education and utilities industries were the most satisfied
- **Industry attitude to training–changes**
  - Employers were generally satisfied that the VET system is providing the skills they need, although the mining and communication services industries were the least satisfied here
- **Employer size differences**
  - Large employers were more likely to be satisfied with the VET system

Table 10.12: 'The VET system is providing graduates with skills appropriate to employers' needs'

	% That agreed	% That disagreed
Agriculture, forestry and fishing	53	24
Mining	12	84
Manufacturing	45	42
Electricity, gas and water supply	57	22
Construction	58	29
Wholesale Trade	43	39
Retail Trade	57	23
Accommodation, cafes and restaurants	73	8
Transport and storage	45	22
Communication services	20	42
Finance and insurance services	37	6
Property and business services	55	30
Government administration and defence	68	26
Education	41	8
Health and community services	67	10
Cultural and recreational services	65	17
Personal and other services	72	11
All industries	56	25

Table 10.13: 'The VET system does not take the needs of employers into account'

	% That agreed	% That disagreed
Agriculture, forestry and fishing	43	31
Mining	86	10
Manufacturing	42	36
Electricity, gas and water supply	48	38
Construction	43	38
Wholesale Trade	53	20
Retail Trade	47	26
Accommodation, cafes and restaurants	27	63
Transport and storage	28	33
Communication services	65	18
Finance and insurance services	15	48
Property and business services	40	42
Government administration and defence	10	75
Education	45	32
Health and community services	39	32
Cultural and recreational services	42	28
Personal and other services	19	53
All industries	40	37

7 SUCCESSFUL OUTPUTS IN VET

Data Source

Module load completion rate (MLCR) calculations are based on the curriculum hours associated with the module enrolment data submitted to the national VET data collection at NCVER. Table 10.14 outlines the module outcome codes currently reported to under AVETMISS.

Table 10.14: Module Outcomes Reported to Under AVETMISS

01 - Student Assessed Passed	09 - Status granted - Credit Transfer
02 - Student assessed - failed	10 - Withdrew - without failure
03 - Student assessed - result withheld	11 - Withdrew - failed
04 - No assessment - satisfactory completion of class hours	12 - Withdrew - transferred
05 - No assessment - studies not yet completed	90 - Not Stated - blank - information not provided
06 - Status Granted - Recognition of Prior Learning	

Owing to small differences in business practices among the States and Territories, the meaning of some module outcome categories may vary slightly among jurisdictions. The effect of these differences on module load completion rate estimates is not material.

HOURS EXCLUDED

The following hours are excluded from all calculations involving MLCR in this chapter, namely:

- module curriculum hours associated with a course reported as a stream 1000 (recreation, leisure and personal enrichment) course, and
- hours from modules consisting of less than 10 or greater than 400 curriculum hours.

Data Adjustments

- The total number of hours and enrolments reported in 1995 and 1996 as part of the national VET collection were adjusted for invalid module enrolments using information supplied by the maintenance-of-effort activity measures auditors at the National Centre for Vocational Education Research. For further information on these adjustments see the data adjustments notes in this appendix for chapter 8 on unit costs.
- In Queensland, both Recognition for Prior Learning (06) and Credit Transfer (09) are reported under Student Assessed Passed (01) for 1995 and 1996 data collections. The national ratios of 06 and 09 to 01 for TAFE providers were used to adjust TAFE Queensland hours for 01, 06 and 09 accordingly, and to similarly recalculate MLCR for Queensland for 1995.

Additional Notes

MODULE OUTCOMES BY ENROLMENTS BY STATE/TERRITORY, 1996 AND 1995

Table 10.15: Module Outcomes by Enrolments by State/Territory, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
01 Student assessed - passed	1,661,078	1,133,263	661,784	372,342	381,750	104,379	55,092	84,378	4,454,066
02 Student assessed - failed	118,613	190,876	8,148	21,864	11,171	2,486	10,354	6,934	370,446
03 Student assessed - result withheld	9,177	9,420	129,030	8,202	759	17	335	379	157,319
04 No assessment - satisfactory completion of class hours	89,531	106,754	210,522	40,169	18,206	1,274	<5	2,623	469,082
05 No assessment - studies not yet completed	55,649	182,592	1,397	47,139	97,632	17,966	17,275	4,766	424,416
06 Status (or credit) granted - through Recognition of Prior Learning	64,684	38,007	30,160	19,412	4,294	7,322	850	15,285	180,014
09 Status (or credit) granted - through Credit Transfer arrangements	150,749	31,930	47,514	7,257	17,822	14,724	7,227	7,520	284,743
10 Withdrew - without failure	82,408	150,672	1,540	9,306	46,106	5,703	9,314	7,509	312,558
11 Withdrew - failed	269,240	73,432	58,318	8,952	26,342	18,722	473	19,443	474,922
12 Withdrew - transferred	171	7,112	0	0	0	<5	96	250	7,630
90 Not stated	32,089	99,029	87,544	4,605	61,339	<5	6,741	331	291,679
Unknown	84,891	0	0	2,428	0	9,633	9	5,073	102,034
All outcomes	2,618,280	2,023,087	1,236,670	541,676	665,421	182,228	107,769	154,491	7,529,622
Confirmed Invalid Module Enrolments adjustment factor	4.16	13.62	4.52	7.20	7.23	6.55	10.70	6.33	7.46
Adjusted total	2,509,360	1,747,543	1,180,773	502,675	617,311	170,292	96,238	144,712	6,967,912

Source: NCVER 1996 national VET collection, streams 2100-4500 and module only enrolments, where module hours between 10 and 400

Table 10.16: Module Outcomes by Enrolments by State/Territory, 1995

	NSW	VIC	QLD*	SA	WA	TAS	NT	ACT	AUST
01 Student assessed - passed	1,392,360	913,639	560,696	344,113	310,233	81,540	35,059	77,295	3,714,935
02 Student assessed - failed	112,146	103,808	15,250	20,347	14,669	2,051	5,395	7,580	281,246
03 Student assessed - result withheld	7,929	29,325	84,425	4,594	226	0	245	820	127,564
04 No assessment - satisfactory completion of class hours	102,495	108,002	230,756	36,465	9,639	1,370	99	2,921	491,747
05 No assessment - studies not yet completed	68,749	206,301	650	42,444	71,417	9,236	20,093	3,772	422,662
06 Status (or credit) granted - through Recognition of Prior Learning	51,154	28,347	21,835	8,705	2,948	2,960	406	10,493	126,848
09 Status (or credit) granted - through Credit Transfer arrangements	118,638	24,948	37,933	3,191	13,603	11,126	4,233	6,125	219,797
10 Withdrew - without failure	109,879	176,807	0	17,216	54,678	6,088	10,291	7,988	382,947
11 Withdrew - failed	205,819	53,785	92,455	200	37,650	18,395	954	15,929	425,187
12 Withdrew - transferred	0	9,952	2,458	2,356	0	0	656	174	15,596
90 Not stated	2,210	76,417	42,526	5,392	75,808	103	5	2,759	205,220
Unknown	92,045	0	0	0	391	2,086	78	0	94,600
All outcomes	2,263,424	1,731,331	1,088,984	485,023	591,262	134,955	77,514	135,856	6,508,349
Confirmed Invalid Module Enrolments adjustment factor	1.80	8.60	6.68	1.20	6.90	0.69	8.19	3.80	4.89
Adjusted total	2,222,682	1,582,437	1,016,240	479,203	550,465	134,024	71,166	130,693	6,190,091

Source: NCVER 1995 national VET collection, streams 2100-4500 and module only enrolments, where module hours between 10 and 400
*QLD TAFE adjusted to national TAFE average for 06 and 09

MODULE OUTCOMES BY AHC BY STATE/TERRITORY, 1996 AND 1995

Table 10.17: Module Outcomes by AHC by State/Territory, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
01 Student assessed - passed	58,854,593	42,061,390	21,922,662	10,927,181	13,862,381	3,216,474	1,728,509	3,052,816	155,626,006
02 Student assessed - failed	4,647,094	7,418,775	466,709	679,726	519,229	94,006	334,753	273,837	14,434,129
03 Student assessed - result withheld	351,048	402,508	4,655,777	249,698	29,698	921	12,447	11,327	5,713,424
04 No assessment - satisfactory completion of class hours	5,959,349	5,453,533	8,073,606	1,635,762	1,357,226	157,417	90	175,071	22,812,054
05 No assessment - studies not yet completed	2,739,348	8,065,989	46,028	1,354,120	3,627,414	554,552	666,120	177,458	17,231,029
06 Status (or credit) granted - through Recognition of Prior Learning	2,340,308	1,336,504	969,481	532,672	173,627	208,452	31,652	501,729	6,094,425
09 Status (or credit) granted - through Credit Transfer arrangements	5,515,702	1,165,512	1,579,079	188,344	601,667	434,017	236,602	252,906	9,973,829
10 Withdrew - without failure	3,308,628	6,416,753	53,642	315,269	1,724,276	182,350	336,453	286,867	12,624,238
11 Withdrew - failed	11,056,878	3,090,227	2,362,101	306,248	976,427	622,411	16,731	745,807	19,176,830
12 Withdrew - transferred	9,528	276,934	0	0	0	30	3,970	15,387	305,849
90 Not stated	3,091,510	5,554,178	3,100,512	79,268	2,651,843	41	216,956	9,930	14,704,238
Unknown	1,963,334	0	0	117,862	0	308,700	180	139,638	2,529,714
All outcomes	99,837,320	81,242,303	43,252,124	16,386,150	25,523,788	5,779,371	3,584,463	5,642,773	281,248,292
Confirmed Invalid Module Enrolments adjustment factor	4.16	13.62	4.52	7.20	7.23	6.55	10.70	6.33	7.46
Adjusted total	95,684,087	70,177,101	41,297,128	15,206,347	23,678,418	5,400,822	3,200,925	5,285,585	260,267,169

Source: NCVER 1996 national VET collection, streams 2100-4500 and module only enrolments, where module hours between 10 and 400

Table 10.18: Module Outcomes by AHC by State/Territory, 1995

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
01 Student assessed - passed	56,177,186	36,778,654	19,262,347	10,723,011	11,981,420	3,105,075	1,365,825	2,946,319	142,339,837
02 Student assessed - failed	4,806,819	4,444,588	802,513	679,014	686,626	95,056	232,196	330,203	12,077,015
03 Student assessed - result withheld	374,009	1,230,982	2,951,700	142,388	11,089	0	13,456	27,188	4,750,812
04 No assessment - satisfactory completion of class hours	10,830,155	5,592,273	10,461,264	1,516,717	823,895	123,149	19,800	242,369	29,609,622
05 No assessment - studies not yet completed	3,347,130	8,840,853	23,067	1,304,494	2,790,294	347,286	752,252	145,319	17,550,695
06 Status (or credit) granted - through Recognition of Prior Learning	2,056,155	1,062,408	750,492	261,042	123,852	112,491	15,767	405,217	4,787,424
09 Status (or credit) granted - through Credit Transfer arrangements	5,015,199	980,457	1,368,484	87,436	489,718	378,606	158,517	209,836	8,688,253
10 Withdrew - without failure	4,763,009	8,105,261	0	618,913	2,109,688	212,192	451,348	333,681	16,594,092
11 Withdrew - failed	9,126,252	2,381,791	3,696,297	12,001	1,427,245	646,123	40,275	644,914	17,974,898
12 Withdrew - transferred	0	386,126	90,058	83,591	0	0	39,898	7,957	607,630
90 Not stated	755,922	3,480,796	1,424,818	88,603	3,441,909	3,111	592	82,770	9,278,521
Unknown	2,194,836	0	0	0	11,535	77,248	3,273	0	2,286,892
All outcomes	99,446,672	73,284,189	40,831,040	15,517,210	23,897,271	5,100,337	3,093,199	5,375,773	266,545,691
Confirmed Invalid Module Enrolments adjustment factor	1.80	8.60	6.68	1.20	6.90	0.69	8.19	3.80	4.89
Adjusted total	97,656,632	66,981,749	38,103,527	15,331,003	22,248,359	5,065,145	2,839,866	5,171,494	253,511,607

Source: NCVER 1996 national VET collection, streams 2100-4500 and module only enrolments, where module hours between 10 and 400

TABLE 7.1 ADDITIONAL NOTE: COMPETENCY RATE

Regarding 1996 percentage module enrolments by skills acquired and State, the mapping of module outcomes to competency categories appears in table 10.19, using the module outcome codes as described in table 10.14.

Table 10.19: Mapping of Module Outcomes to Skills Acquisition

Competency Achieved or Satisfactory Completion:	01 & 06
Competency Not Achieved:	02 & 11
Competency Not Yet Achieved:	03, 04, 05, 09, 10 & 12
Unknown:	90 & blank.

FORMULA FOR MODULE LOAD PASS RATE (FORMULA I)

The calculation of the module load pass rate is based on the module curriculum hours associated with each module outcome based on formula I in 1995 Benchmarking VET, namely:

$$\text{Formula I} = \frac{01}{01 + 02 + 11} \times 100$$ with the appropriate data adjustments as given above.

FORMULA FOR MODULE LOAD COMPLETION RATE (FORMULA III)

The calculation of the module load completion rate is based on the module curriculum hours associated with each module outcome based on formula III in 1995 Benchmarking VET, namely:

$$\text{Formula III} = \frac{01 + 04}{\text{All activity - 05 - 06 - 09 - 90 - blanks}} \times 100$$ with the appropriate data adjustments as given above.

MODULE LOAD PASS AND COMPLETION RATES FOR GOVERNMENT FUNDED ONLY PROGRAMS

Table 10.20: Pass Rate by State/Territory for Government Funded Only Programs, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Pass Rate	78.6	79.7	88.7	92.0	90.1	82.7	79.5	78.3	82.0

Table 10.21: Completion Rate by State/Territory for Government Funded Only Programs, 1996

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Completion Rate	80.6	86.3	85.5	96.6	90.2	86.6	78.1	79.8	84.3

REVISION OF 1995 FIGURES

The figures for 1995 have been revised since 1995 Benchmarking VET. These revisions include:

- adjustment to Queensland for both recognition of prior learning (06) and credit transfer (09), which was reported under 'student assessed-passed' (01) for 1995,
- changes to formula III with module outcome 05 and blanks now also excluded from the denominator, and
- module only activity included (that is modules without corresponding course enrolments).

MODULE LOAD PASS AND COMPLETION RATES FOR 1996 USING THE SAME DATA COLLECTION BASE AS FOR 1995

Direct comparisons of 1995 and 1996 data are not possible for a number of reasons. There has been a change in the scope of the data collected with the introduction of private provider and publicly-funded activity along with increased reporting from community based providers. Module load pass and completion rate figures for 1996 calculated on the same reporting basis as for 1995 follow.

Table 10.22: Pass Rates for 1996 Based on the Same Collection Base as for 1995 by State/Territory

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Pass Rate	78.8	80.0	88.5	91.7	90.3	81.0	77.4	75.0	82.1

Table 10.23: Completion Rates for 1996 Based on the Same Collection Base as for 1995 by State/Territory

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Completion Rate	80.8	87.5	84.2	96.9	91.6	85.5	77.5	76.6	84.8

8 UNIT COSTS

Data Source

Unit cost estimates are based on maintenance-of-effort financial and activity data supplied by ANTA. Both sets of figures are audited.

Data Adjustments

When students undertake vocational education and training programs they formally enrol in a set of modules (subjects) which make up the program. This process involves completing an enrolment form, gaining approval from the provider, and paying the required fees. This enrolment process usually happens sometime before classes actually start. For example, in TAFE institutes most students enrol at the beginning of each year or each semester, and they pay their fees at the same time.

However, when classes commence, some students do not start all of the modules for which they are enrolled. In a small proportion of cases they may decide not to study at all. However, more commonly, students who have enroled in, say, four modules will opt to take only two or three.

The student record systems which VET providers use are sometimes unable to exclude such enrolments when the information required for the national collection of VET data is reported to NCVER. As a result, the data for each calendar year contain a small number of subject enrolments where the student has not attended any classes or submitted any work, or where the enrolment has been created in error.

The NCVER conducts activity audits on an annual basis as part of the maintenance-of-effort requirements of the ANTA Agreement. Whilst auditing 1996 data, three different types of module enrolments were identified in the preliminary audit reports:

- *valid enrolments:* the student attended class or submitted at least one piece of work
- *confirmed invalid enrolments:* there was no evidence that the enrolment was valid, and
- *possible invalid enrolment:* yet to be determined whether the enrolment was valid (will be identified as 'valid' or 'confirmed invalid' in the final audit reports due in September 1997).

The extent of enrolments under each of these categories was identified by the NCVER auditors using a stratified sample of module enrolments in each State and Territory. For the purpose of this report, the proportion of confirmed invalid enrolments has been used to adjust annual curriculum hours. It should be noted that this adjustment is expected to be conservative since it is most likely that a significant proportion of the 'possible invalid' enrolments would be confirmed as invalid. The rate of invalid module enrolments is outlined in table 10.24 below. It should also be noted that these are preliminary figures to be revised in the NCVER's final audit reports, due in September 1997.

Table 10.24: Adjustment Factors for Invalid Module Enrolments in 1996 (Per cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Confirmed	4.16	13.62	4.52	7.20	7.23	6.55	10.60	6.33	7.46
Confirmed + Possible	5.81	13.62	12.51	10.70	14.13	13.95	15.50	13.87	10.45

Source: ANTA

FINANCIAL DATA

To promote the comparability of financial data among the States and Territories, the following adjustments have been made.

- In Victoria, inclusion of the contribution made by the Department of Education to the head office costs of the Office of Training and Further Education.
- In the ACT, an adjustment for a difference in the threshold set for the definition of capital items.

- In WA, removal of a capital charge on borrowings by independent colleges from the State government.
- In WA, the inclusion of standard student fees and charges retained by VET agencies.
- In States/Territories which have the capacity to identify the specific amounts, removal of one-off payments (redundancy and other).

ACTIVITY DATA

To promote comparability of activity data, the following adjustments have been made.

- Total activity has been adjusted for invalid module enrolments (formerly known as 'module enrolments - no attendance') based on information supplied by the NCVER maintenance-of-effort activity measures auditors.
- The adjustment for invalid module enrolments includes, where applicable, an adjustment for enrolments (such as 'missing marks') which have not been reported by training organisations even though there has been some attendance or submission of work by the client.
- For module enrolments reported with an outcome of RPL (recognition of prior learning) hours have been counted using the formula of five hours plus 10 per cent of module curriculum hours to a maximum of 10 hours (for modules of less than five curriculum hours, the full curriculum hours are used).

Additional Notes

The following national cost relativities were applied to the estimated 1996 annual hours curriculum (from 1997 State Training Profiles) to determine the course-mix weightings for each State and Territory.

Table 10.25: Index of National VET Cost Relativities

Training Area	Weight
Category A	
Arts, Entertainment, Sports & Rec	1.03
Automotive	1.33
Building and Construction	1.16
Community Services, Health & Ed	0.91
Finance, Banking & Insurance	0.68
Food Processing	1.14
TCF and Furnishings	1.18
Communications	1.16
Engineering and Mining	1.28
Primary Industry	1.12
Process Manufacturing	1.16
Sales and Personal Service	0.94
Tourism and Hospitality	1.10
Transport and Storage	1.20
Utilities	1.29
Category B	
Business and Clerical	0.79
Computing	0.84
Science, Technical and Other	1.06
Category C	
General Education and Training	0.85
TOTAL	1.00

Source: Derived by ANTA from information provided by the Unit Cost Working Party

WHAT WERE UNIT COSTS IN 1995?

Recurrent expenditure per annual curriculum hour for 1995 was reported in last years report based on interim 1995 audited information. Final audited information is now available and derived unit costs are reported below in table 10.26 as 'final' 1995 data. To enable comparisons to be made with the interim 1996 data in real terms, 'final' 1995 data in 1996 prices are also reported.

Table 10.26: Update of Unit Costs of VET Provision in 1995

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Original (in 1995 prices)	10.6	8.3	10.8	11.9	11.8	14.9	20.3	14.7	10.5
Final (in 1995 prices)	10.6	8.8	10.7	12.8	12.4	15.1	19.0	15.2	10.7
Final (in 1996 prices)	10.9	9.0	11.0	13.2	12.8	15.5	19.5	15.7	11.0

Note: 1996 data is based on interim audit reports.

COMPARISON OF UNIT COSTS IN 1995 AND 1996 (IN 1996 PRICES)

Table 10.27: Data Used to Calculate 1995 and 1996 Unit Costs (in 1996 prices)

1995	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Recurrent Expenditure ($m)	895.93	509.63	333.11	184.80	228.50	57.16	45.99	55.79	2,310.93
Recurrent Expenditure in 1996 Prices ($m)	921.02	523.90	342.44	189.98	234.90	58.76	47.28	57.36	2,375.63
AHC ('000)	86,797	62,291	33,635	14,305	19,803	3,671	2,656	3,716	226,874
Confirmed invalid enrolment (%)	1.00	8.60	6.68	1.20	6.90	0.69	8.19	3.80	4.58
$/Adjusted AHC	10.72	9.20	10.91	13.44	12.74	16.12	19.39	16.04	10.97
Course-mix weighting	0.98	1.02	0.99	1.02	1.00	1.04	0.99	1.02	1.00
$/Adjusted AHC (course-mix weighted)	10.9	9.0	11.0	13.2	12.8	15.5	19.5	15.7	11.0
1996	**NSW**	**VIC**	**QLD**	**SA**	**WA**	**TAS**	**NT**	**ACT**	**AUST**
Recurrent Expenditure ($m)	932.09	541.99	367.20	190.71	224.45	57.12	47.42	57.18	2,418.17
AHC ('000)	86,932	65,072	35,785	14,688	21,463	4,140	2,414	3,999	234,584
Confirmed invalid enrolment	4.16	13.62	4.52	7.20	7.23	6.55	10.60	6.33	7.46
$/Adjusted AHC	11.19	9.64	10.75	13.99	11.27	14.76	21.97	15.26	11.14
Course-mix weighting	0.98	1.01	1.00	1.02	0.99	1.04	1.01	1.00	1.00
$/Adjusted AHC (course-mix weighted)	11.4	9.5	10.7	13.8	11.3	14.3	21.8	15.2	11.1

Note:1996 data is based on interim audit reports. AHC data for New South Wales in 1996 includes an estimate of under-reporting against the introduced 'no start' code, aimed at improving data quality in this jurisdiction. The interim audit report for South Australia may have slightly overstated the percentage of invalid module enrolments in 1996.

Table 10.28 indicates the impact on the reported unit costs between applying only the confirmed invalid module enrolments (minimum) and assuming that the possible invalid enrolments are indeed invalid (maximum).

Table 10.28: Impact of Possible Invalid Module Enrolments on Unit Costs in 1996 (in 1996 Prices)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Unit Cost (minimum)	11.4	9.5	10.7	13.8	11.3	14.3	21.8	15.2	11.1
Unit Cost (maximum)	11.6	9.5	11.7	14.3	12.2	15.5	23.1	16.5	11.5

Note: Based on interim audit reports. The interim audit report for South Australia may have slightly overstated the percentage of invalid module enrolments.

WHAT ARE THE UNIT COSTS OF SUCCESSFUL MODULE COMPLETIONS?

Table 10.29: Data Used to Calculate Government Recurrent Expenditure Per Hour of Successful Module Completion in Government-Funded Programs

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Student assessed - passed (01)	53,785,004	35,304,077	20,578,571	9,849,558	12,894,918	2,702,866	1,009,520	2,539,639	138,664,153
Student not assessed - satisfactory completion of class hours (04)	5,238,035	3,123,922	5,546,857	393,204	196,100	8,973	70	146,331	14,653,492
Total (MOE)	81,904,353	62,360,951	34,378,964	13,229,432	21,552,692	4,225,644	2,284,122	3,806,308	223,742,466
True Total	86,931,592	65,072,360	35,785,096	14,688,048	21,462,855	4,139,959	2,414,450	3,999,370	234,493,731
Adjusted module load completion (01+04) (to true total)	62,645,837	40,098,821	27,193,983	11,372,081	13,036,452	2,656,850	1,067,196	2,822,207	160,684,859
Course mix weighting	0.98	1.01	1.00	1.02	0.99	1.04	1.01	1.00	1.00
Adjusted module load completion (to true total plus course mix)	61,650,423	40,681,089	27,299,587	11,570,450	12,969,603	2,751,241	1,073,863	2,834,603	160,684,859
Recurrent expenditure ($m)	932.09	541.99	367.20	190.71	224.45	57.12	47.42	57.18	2,418.17
$ per Govt funded MLC in 1996 prices (course mix adjusted)	15.12	13.32	13.45	16.48	17.31	20.76	44.15	20.17	15.05

Table 10.30: Data Used to Calculate Government Recurrent Expenditure Per Hour of Successful Module Completion in All Programs

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Student assessed - passed (01)	59,910,856	42,638,841	25,115,348	11,169,223	14,161,023	3,306,247	1,777,191	3,114,875	161,193,604
Student not assessed - satisfactory completion of class hours(04)	5,995,902	5,062,819	8,285,779	1,694,065	1,377,889	137,691	90	176,741	22,730,976
Module load completion (01 + 04)	65,906,758	47,701,660	33,401,127	12,863,288	15,538,912	3,443,938	1,777,281	3,291,616	183,924,580
Course mix weighting	0.98	1.01	1.00	1.02	0.99	1.04	1.01	1.00	1.00
Adjusted Module load completion (course mix)	64,859,529	48,394,328	33,530,836	13,087,668	15,459,232	3,566,293	1,788,385	3,306,073	183,924,580
Recurrent expenditure ($m)	932.09	541.99	367.20	190.71	224.45	57.12	47.42	57.18	2,418.17
$ per all MLC in 1996 prices (course mix adjusted)	14.37	11.20	10.95	14.57	14.52	16.02	26.51	17.30	13.15

CALCULATION OF ESTIMATES OF COST OF FULL-TIME EQUIVALENT STUDENTS

The methodology used to arrive at the estimates of cost of full-time equivalent students in the school, VET, and university sectors in table 8.5 was as follows:

For Secondary Schools (All Grades)–$6,110
Total government funded secondary school expenditure divided by the total number of students in government funded schools. 1994 data from the MCEETYA 1994 Annual National Report was adjusted to 1995 by using the CPI and rounded to the nearest 100.

For VET–$8,000
Average unit cost multiplied by 720 hours (equivalent full-time) and rounded to the nearest 100.

For the University Sector–$11,800
The full cost of total recurrent costs, excluding university research costs, of the university sector divided by the total number of students and rounded to the nearest 100.

WHAT DOES THE COMMONWEALTH GRANTS COMMISSION SAY ABOUT INTERSTATE DIFFERENCES IN VET?

Commonwealth Grants Commission's Service Delivery Costs: An Outline

The Commonwealth Grants Commission has the responsibility to advise the Commonwealth Government on cost differentials across the States/Territories. The Commission has a mandate to analyse why some States/Territories spend less, and others more, than the Commission's assessment of what they need to spend to provide a standard level of service at an average level of efficiency.

The Commission analyses the relative expenditure on a broad range of government goods and services and uses a range of 'disability' factors to weight State/Territory grants. These are of two types: those factors which are program **cost** related and those that are **demand** related. The VET cost factor weightings have been used by ANTA in analysing interstate differences in costs.

The Commonwealth Grants Commission cost factors are:

- administrative scale
- dispersion
- service delivery scale
- input costs
- socio-economic composition

The Commonwealth Grants Commission demand factors are:

- relevant population
- age/sex composition
- urbanisation
- cross border
- economic environment

Table 10.31: 1996 TAFE Cost Factors Using the Methodology Developed for the 1993 Review

NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
0.9960	0.9702	0.9962	1.0101	1.0314	1.0583	1.4734	1.0170	1.0000

Table 10.31 shows the 1996 weightings for TAFE cost factors. Notwithstanding the comprehensive analysis undertaken by the Commission, the weightings indicate that, excluding Tasmania and the Northern Territory, there is only a modest variation among jurisdictions.

9 ACTUAL AND PLANNED ACTIVITY

Data Source

Actual and planned activity are based on figures which relate to the maintenance-of-effort (MOE) agreements between ANTA and each State and Territory.

Planned activity refers to the revised targets for the 1996, as proposed by the State or Territory and accepted by ANTA as meeting (or being above) MOE Targets. The actual figure is derived from the NCVER activity audits and in order to make it comparable with planned activity, excludes activity outside the ANTA scope and boundary.

Data Adjustments

Due to methodological issues, invalid module enrolments have been treated differently when examining actual and planned activity and relative effort:

- when examining *actual and planned* activity, the data have not been adjusted to exclude activity associated with invalid module enrolments. As the comparison focuses on activity within a single jurisdiction over time, the effect of the invalid module enrolments is immaterial
- when examining *relative effort*, the data have been adjusted to exclude activity associated with invalid module enrolments. This is in order to make the data more comparable between jurisdictions and to present a more accurate account of effort.

Additional Notes

WHAT ARE ANNUAL HOURS CURRICULUM (AHC)?
Annual Hours Curriculum are used as a measure of delivery. They are based on the standard curriculum hours for each module (subject) when the module is undertaken in standard, supervised delivery mode (usually a classroom or instruction site), although some clients undertake modules in self-paced learning, flexible-delivery or distance-learning modes.

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